

Parenting with a diagnosis of Borderline Personality Disorder: A case for
targeted interventions.

A thesis submitted for the degree of Doctor of Philosophy

by

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TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
LIST OF TABLES AND FIGURES.....	6
ABSTRACT.....	8
DECLARATION.....	10
ACKNOWLEDGEMENTS	11
DEDICATION	12
CHAPTER 1: UNDERSTANDING BORDERLINE PERSONALITY DISORDER.....	13
1.1 PREAMBLE.....	13
1.2 OVERVIEW	13
1.3 CLINICAL FEATURES	16
1.4 PREVALENCE	18
1.5 COMORBIDITY	20
1.6 PROGNOSIS	21
1.7 AETIOLOGY	23
1.8 A MODEL FOR THE DEVELOPMENT OF BPD	40
1.9 TREATMENT.....	43
1.10 BPD AND IMPLICATIONS FOR PARENTING.	52
1.11 CHAPTER SUMMARY.....	56

CHAPTER 2: PARENTING AND BORDERLINE PERSONALITY DISORDER58

2.1	PREAMBLE.....	58
2.2	PARENTING: WHAT IS 'GOOD-ENOUGH'?	58
2.3	PARENTING AND CHILD DEVELOPMENT	61
2.4	PARENTING AND MENTAL HEALTH	69
2.5	BPD AND PARENTING.....	71
2.6	THESIS AIMS	95

CHAPTER 3: PAPER ONE.....97

3.1	PREAMBLE.....	97
3.2	STATEMENT OF AUTHORSHIP	100
3.3	ABSTRACT	102
3.4	INTRODUCTION.....	104
3.5	METHOD.....	108
3.6	RESULTS.....	110
3.7	DISCUSSION	123

CHAPTER 4: PAPER TWO.....129

4.1	PREAMBLE.....	129
4.2	STATEMENT OF AUTHORSHIP	131
4.3	ABSTRACT	133
4.4	INTRODUCTION.....	134
4.5	METHOD.....	137
4.6	RESULTS.....	139

4.7 DISCUSSION	145
CHAPTER 5: PAPER THREE	151
5.1 PREAMBLE.....	151
5.2 STATEMENT OF AUTHORSHIP	153
5.3 ABSTRACT	155
5.4 INTRODUCTION.....	156
5.5 METHODS	158
5.6 RESULTS.....	165
5.7 DISCUSSION	174
CHAPTER 6: PAPER FOUR.....	180
6.1 PREAMBLE.....	180
6.2 STATEMENT OF AUTHORSHIP	183
6.3 ABSTRACT	185
6.4 INTRODUCTION.....	187
6.5 AIMS.....	191
6.6 METHOD.....	192
6.7 RESULTS.....	200
6.8 DISCUSSION	207
CHAPTER 7: DISCUSSION	215
7.1 OVERVIEW	215
7.2 REVIEW OF THESIS FINDINGS.....	216
7.3 CLINICAL IMPLICATIONS.....	230

7.4	CONSIDERATIONS FOR FUTURE RESEARCH.....	236
7.5	THESIS STRENGTHS AND LIMITATIONS	239
7.6	CONCLUSION	243
CHAPTER 8:	REFERENCES	244
APPENDIX A.....		304
APPENDIX B.....		308

LIST OF TABLES AND FIGURES

TABLE 1- DSM-5 DIAGNOSTIC CRITERIA FOR BORDERLINE PERSONALITY DISORDER (APA, 2013, P 663).....	17
TABLE 2 - TEN COMPETENCIES THAT PREDICT GOOD PARENTING OUTCOMES (EPSTEIN, 2010, P. 49)	65
TABLE 3- FREQUENCIES AND PERCENTAGES OF SAMPLE DEMOGRAPHICS (N= 106)	111
TABLE 4- SUMMARY OF MENTAL HEALTH CLINICIANS’ RECOMMENDATIONS FOR THE DEVELOPMENT OF PARENTING INTERVENTIONS FOR FAMILIES WHERE A PARENT HAS A DIAGNOSIS OF BPD.	122
TABLE 5. FREQUENCIES AND PERCENTAGES OF SAMPLE DEMOGRAPHICS.....	139
TABLE 6. DEMOGRAPHIC CHARACTERISTICS OF CHILDREN (N=28) OF PARENTS WITH A DIAGNOSIS OF BORDERLINE PERSONALITY DISORDER (BPD).	160
TABLE 7. NUMBER OF CHILDREN (N=9) IN THE NORMAL, BORDERLINE, AND ABNORMAL RANGES ON THE STRENGTHS AND DIFFICULTIES QUESTIONNAIRE.	161
TABLE 8. FREQUENCIES AND PERCENTAGES OF PARENT DEMOGRAPHICS (N=64).	193
TABLE 9. DEMOGRAPHICS OF CHILDREN OF PARENTS WITH BORDERLINE SYMPTOMS SPLIT BY AGE RANGE (N=64).	195
TABLE 10. SPEARMAN RHO CORRELATIONS BETWEEN PARENTAL BORDERLINE SYMPTOMS, PARENTING STYLES AND PARENTAL REPORTS OF CHILD PSYCHOPATHOLOGY AND MEAN SCORES AND STANDARD DEVIATIONS FOR EACH OF THE SCALES (N=64).....	202
TABLE 11. BOOTSTRAPPING COEFFICIENTS AND 95% CONFIDENCE INTERVALS (CIs) FOR INDIRECT EFFECTS AND CONTRASTS WITH PARENTAL BORDERLINE SYMPTOM SEVERITY AS THE INDEPENDENT VARIABLE, PARENTAL EMPATHY AND AUTHORITARIAN PARENTING AS MEDIATORS, AND CHILD PSYCHOPATHOLOGY AS THE DEPENDANT VARIABLE.	204

TABLE 12. BOOTSTRAPPING COEFFICIENTS AND 95% CONFIDENCE INTERVALS (CIs) FOR INDIRECT EFFECTS AND CONTRASTS WITH PARENTAL BORDERLINE SYMPTOM SEVERITY AS THE INDEPENDENT VARIABLE, PARENTAL EMPATHY AND PERMISSIVE PARENTING AS MEDIATORS, AND CHILD PSYCHOPATHOLOGY AS THE DEPENDANT VARIABLE.	206
FIGURE 1. THE BIOSOCIAL MODEL FOR THE DEVELOPMENT OF BPD BY LINEHAN (1993, p.60). COPYRIGHT GUILDFORD PRESS. REPRINTED WITH PERMISSION OF THE GUILDFORD PRESS.	146
FIGURE 2. MODEL PROPOSED TO DEMONSTRATE THE POTENTIAL FOR TRANSGENERATIONAL TRANSMISSION OF EMOTIONAL DYSREGULATION FROM PARENT DIAGNOSED WITH BPD TO OFFSPRING.	148
FIGURE 3. EXPERIENCE OF PARENTS WITH A DIAGNOSIS OF BORDERLINE PERSONALITY DISORDER (BPD): KEY THEMES AND SUBTHEMES.	166
FIGURE 4. UNSTANDARDIZED REGRESSION COEFFICIENTS OF A THREE-PATH SEQUENTIAL MEDIATION MODEL LINKING PARENTAL BORDERLINE SYMPTOM SEVERITY TO CHILD PSYCHOPATHOLOGY THROUGH PARENTAL EMPATHY AND AUTHORITARIAN PARENTING STYLE.	203
FIGURE 5. UNSTANDARDIZED REGRESSION COEFFICIENTS OF A THREE-PATH SEQUENTIAL MEDIATION MODEL LINKING PARENTAL BORDERLINE SYMPTOM SEVERITY TO CHILD PSYCHOPATHOLOGY THROUGH PARENTAL EMPATHY AND PERMISSIVE PARENTING STYLE.	205

ABSTRACT

Parenting is a valued and rewarding role for many people. The nature of parenting is challenging, particularly if parents also struggle with mental illness. The persistent instability in affect, identity, cognition, relationships and behaviour characteristic of borderline personality disorder is likely to impact on parenting. This thesis aimed to extend the understanding of challenges experienced by parents with a diagnosis of BPD and to inform the development of targeted interventions for this population.

Chapter one presents an overview of the clinical features, aetiology and treatment of BPD. This chapter provides context to understand the biological and environmental risk factors for families where a parent is diagnosed with BPD. Chapter two summarises concepts of parenting followed by a detailed examination of the literature related to parents with borderline symptoms and their children. This chapter considers gaps in knowledge and the thesis aims.

Chapters three through six present a series of research papers examining the topic utilising a mixed methods approach. The first paper applied a qualitative research design drawing on clinician (n= 106) observations of parenting challenges among families where a parent had a diagnosis of BPD. Five themes emerged: disruption to empathic responsiveness, difficulties maintaining stable and/or safe environments, difficulty managing interpersonal boundaries, poor parental self-efficacy, and parenting skill deficits. Clinicians also provided their views on the effectiveness of current therapies and recommendations for the development of targeted interventions.

Chapter four presents the second published paper, which explored clinicians (n = 64) observations of the impact of a parental diagnosis of BPD on offspring.

Thematic analysis revealed that children were at risk of developing behaviour, emotional, and interpersonal difficulties as well as cognitive disturbances and self-dysfunction. Clinicians also reported protective factors for offspring. This paper considered the potential for transgenerational transmission of emotional dysregulation from parent to child.

Chapter five comprises the third published paper, a qualitative analysis of responses from focus group/interviews with parents who had been diagnosed with BPD. Four main themes were identified, namely parenting challenges, parenting rewards, barriers to accessing support and recommendations for improving parenting experience. The parenting challenges identified were consistent with those reported by clinicians demonstrating convergence of perspectives. Furthermore, inadequate diagnosis and treatment of parental mental illness as well as unsuitable parenting services were barriers to accessing support.

Chapter six contains the final paper, a quantitative analysis to verify the existence of relationships specified in previous papers. Analysis of parent responses (n = 64) identified negative associations between parental borderline symptom severity and parental empathy; and positive associations with maladaptive parenting styles. Specifically, parental borderline symptom severity was related to child psychopathology through two indirect pathways 1) authoritarian parenting style and 2) parental empathy's relationship with authoritarian parenting style.

Chapter seven reviews the findings of the thesis, outlines clinical implications, future research opportunities and considers the strengths and limitations of the work. Overall, the mixed methods approach of the thesis adds depth of understanding to the topic utilising multiple viewpoints and methodologies. Specific targets and strategies for intervention are recommended.

DECLARATION

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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Dianna Bartsch

Signed:

Date: 10/11/19

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DEDICATION

I dedicate this thesis to my children, Harry and Annabel. I will constantly aspire to be a ‘good enough’ parent to you both. I hope to encourage and support you to pursue your interests and follow your dreams throughout your lives. Persistence and hard work will pay off... eventually.

Love you beyond words,

x Mummy

Chapter 1: Understanding Borderline Personality Disorder

1.1 Preamble

Chapter one of this thesis aims to provide the reader with a background understanding of the clinical features of borderline personality disorder (BPD) including prognosis, prevalence and co-morbidity. A comprehensive review of the literature summarising aetiology is provided and explores biological, environmental and child risk factors. The detailed inclusion of this information aims to provide context regarding the potential pathways for the transgenerational transmission of BPD (or its symptoms) from parent to child. Chapter one briefly describes the prominent aetiological theories for the development of BPD with a focus on biosocial theory (Linehan, 1993) as this is the main theoretical orientation underlying the thesis work. Finally, a summary of the main treatment approaches for BPD is presented to provide context for how the disorder is treated as this may inform the development of parenting interventions for this population.

1.2 Overview

Borderline Personality Disorder (BPD) is a pervasive and difficult to treat mental illness characterised by dysregulation of emotions, behaviour, cognition, sense of self and interpersonal relationships (American Psychiatric Association, 2013). This disorder is associated with high service utilisation and impaired psychosocial functioning (Ansell, Sanislow, McGlashan, & Grilo, 2007), high comorbidity (Grant et al., 2008; McGlashan et al., 2000; Zanarini et al., 1998), chronic physical health problems (Powers & Oltmanns, 2013), self-harm, and risk of suicide (Paris & Zweig-

Frank, 2001). BPD is associated with impairments in interpersonal functioning including difficulty trusting others, hypervigilance to rejection/abandonment, and problems understanding other's emotion and extralinguistic cues (Lazarus, Cheavens, Festa, & Zachary Rosenthal, 2014).

Interpersonal dysfunction in BPD is likely to extend to parent-child relationships. Indeed, when the work towards this thesis commenced in 2010 there was literature indicative of problematic maternal-infant interactions (Crandell, Patrick, & Hobson, 2003; Delavenne, Gratier, Devouche, & Apter, 2008; Hobson, Patrick, Crandell, García-Pérez, & Lee, 2005; Hobson et al., 2009; Macfie & Swan, 2009; Newman, Stevenson, Bergman, & Boyce, 2007) and parenting characterised by overcontrol and hostility (Barnow, Spitzer, Grabe, Kessler, & Freyberger, 2006; Feldman et al., 1995; Herr, Hammen, & Brennan, 2008). Furthermore, infants of parents with a diagnosis of BPD were more likely to be assessed as having disorganised attachment (Hobson et al., 2005) and children and adolescents reported greater psychopathology compared to controls (Abela, Skitch, Auerbach, & Adams, 2005; Barnow et al., 2006; Feldman et al., 1995; Jellinek, Bishop, Murphy, Biederman, & Rosenbaum, 1991; Weiss et al., 1996).

Overall, the number of independent samples analysed were limited, and they were generally based on small sample sizes. Studies exclusively utilised quantitative analysis which restricted the exploration of parenting and offspring outcomes to the pre-determined variables of interest to the investigator. Furthermore, despite the literature indicating that parents with a diagnosis of BPD and their children were a high-risk group, there was a lack of literature identifying whether these parents would engage or benefit from parenting programs.

Evidence suggests that maternal mental health influences participant's responses to standard parenting skills training programs, which require a high level of motivation and consistent responses from the parent in order to be successful (Reyno & McGrath, 2006). Parental emotional dysregulation may make it difficult to generalise the skills learnt in parent skills training to the natural environment (Ben-Porath, 2010). Parents diagnosed with mental illness are also less likely to engage with parenting skills training due to fears of stigma and the possibility of having their child removed from their custody (Phelan, Lee, Howe, & Walter, 2006). A number of theorists have suggested that parents with a diagnosis of BPD may benefit from parenting programmes that are tailored to their needs (Ben-Porath, 2010; Stepp, Whalen, Pilkonis, Hipwell, & Levine, 2012a). In 2012, the Australian clinical guidelines for the management of BPD (National Health and Medical Research Council, 2012) were released. These guidelines recommended that further research be conducted to explore the psychological, social, and development effects of a parental diagnosis of BPD on children. Furthermore, the guidelines highlighted the need for interventions targeted at mothers with a diagnosis of BPD with the aim of improving parent-child relationships and developmental outcomes for children.

Intervention development requires a detailed understanding of the problem which can be achieved by reviewing the existing theoretical and empirical evidence-base (Bartholomew, Parcel, & Kok, 1998). Qualitative methods such as focus groups can be used to explore clinician and service-user perspectives of behaviours to be targeted, current gaps in service provision/community resources, and considerations for implementation (Bartholomew et al., 1998). Quantitative methods, such as structured questionnaires, can be used to test the prevalence and strength of

behavioural targets (Bartholomew et al., 1998). The data from these sources can usefully inform the objectives of the intervention program.

The aim of the current research was to extend the literature regarding the impact of a parental diagnosis of BPD on parenting and offspring with the view of identifying targets for change that could inform the development of interventions. A mixed-methods approach was utilised. Qualitative methods were applied to gain an in-depth insight into the topic from both the perspective of clinicians who had observed a multitude of families in clinical practice and parents with a diagnosis of BPD. A quantitative study was then facilitated to test the proposed relationships between parental borderline symptom severity, parenting variables and child psychopathology. Recommendations for the development of targeted interventions for families where a parent has a diagnosis of BPD are discussed.

1.3 Clinical Features

According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5; APA, 2013) borderline personality disorder is characterised by a pervasive pattern of instability in emotions, behaviour, interpersonal relationships, cognition and self-image. The DSM-5 diagnostic criteria (APA, 2013, p. 663) are outlined below¹.

¹ There is current debate regarding whether BPD is best conceptualised as a categorical diagnosis or within a dimensional trait model (e.g. International Classification of Diseases, version 11). Given that the existing literature has been predominantly based on categorical diagnosis this definition is retained for the current thesis.

Table 1- DSM-5 diagnostic criteria for Borderline Personality Disorder (APA, 2013, p 663).

A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts as indicated by five (or more) of the following:

1. Frantic efforts to avoid real or imagined abandonment. (**Note:** Do not include suicidal or self-mutilating behaviour covered in Criterion 5.)
 2. A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation.
 3. Identity disturbance: markedly and persistently unstable self-image or sense of self.
 4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). (**Note:** Do not include suicidal or self-mutilating behaviour covered in Criterion 5.)
 5. Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behaviour.
 6. Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
 7. Chronic feelings of emptiness.
 8. Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).
 9. Transient, stress-related paranoid ideation or severe dissociative symptoms.
-

The psychosocial impairment associated with BPD is severe with significantly poorer overall functioning compared to people diagnosed with other mental health disorders and healthy comparisons (Ansell et al., 2007; Javaras, Zanarini, Hudson, Greenfield, & Gunderson, 2017; Skodol et al., 2002). Service utilisation among these patients has been found to be higher when compared to control groups in both psychiatric (Ansell et al., 2007; Sansone, Songer, & Miller, 2005) and non-psychiatric settings (Ansell et al., 2007). Despite frequent service use, patients diagnosed with BPD have been described as difficult to engage in standard treatment (Gunderson et al., 1989; Skodol, Buckley, & Charles, 1983). Morbidity associated with the diagnosis is concerning, as an estimated 10% of patients with the disorder suicide (Paris & Zweig-Frank, 2001). Furthermore, patients diagnosed with BPD have been found to engage in twice as many self-harm behaviours compared to inpatients with a non-BPD diagnosis (Sansone et al., 2005). In general, the disorder is considered heterogeneous with researchers estimating that the diagnostic criteria enable as many as 151 symptom combinations (Sanislow et al., 2002).

1.4 Prevalence

The prevalence of BPD has been explored in a number of large adult-population based studies with estimates ranging from 0.5 to 1.6 % (Coid, Yang, Tyrer, Roberts, & Ullrich, 2006; Lenzenweger, Lane, Loranger, & Kessler, 2007; Samuels et al., 2002; ten Have et al., 2016; Torgersen, Kringlen, & Cramer, 2001). One study demonstrated a lifetime prevalence rate in the United States of America (USA) at 5.9% (Grant et al., 2008). Locally, Jackson and Burgess (2000) estimated the prevalence of BPD in an Australian community sample utilising the International

Classification of Diseases version 10 (ICD-10; World Health Organization, 1992) personality disorder criteria. They based their data on the assessment of 10,641 Australians and utilised weighted population estimates which indicated that approximately 0.95% of Australians were estimated to meet the diagnostic criteria for BPD.

Estimates of BPD differ depending on the context. For example, the prevalence of BPD in clinical psychiatric outpatient settings varies from 9.3% to 22.6% when assessed using semi-structured interviews (Korzekwa, Dell, Links, Thabane, & Webb, 2008; Zimmerman, Rothschild, & Chelminski, 2005). The prevalence of BPD in inpatient psychiatric samples has demonstrated even higher rates estimated between 20% to 43% (Dahl, 1986; Grilo et al., 1998; Marinangeli et al., 2000). Furthermore, the prevalence of BPD in primary care settings has been estimated at around 6% (Gross, Olfson, Gameroff, & et al., 2002) with reports of between 25 and 50% in forensic settings (Sansone & Sansone, 2009a).

The gender distribution of BPD remains debated within the literature. For example, the rates of BPD have been reported as 3:1 in favour of women (APA, 2013). However, large scale epidemiological investigations have found no significant gender differences in the prevalence of BPD (Grant et al., 2008; Jackson & Burgess, 2000; Torgersen et al., 2001). As such, it has been suggested that the gender differences observed in clinical settings may be reflective of gender stereotypes and clinician bias toward diagnosing women with BPD (Sansone & Sansone, 2011). Furthermore, higher rates of women diagnosed in clinical settings may reflect sampling bias, in which women are more likely to seek mental health treatment whereas men are more likely to end up in substance abuse programmes and correctional settings (Gunderson, Weinberg, & Choi-Kain, 2013).

The presence of BPD has been observed internationally and across cultures (Grant et al., 2008; Ikuta et al., 1994; Jackson & Burgess, 2000; Loranger et al., 1994; Pinto, Dhavale, Nair, Patil, & Dewan, 2000; Ponde, Freire, & Mendonca, 2011; Senol, Dereboy, & Yüksel, 1997; Torgersen et al., 2001; Wang et al., 2012). However, the symptom prevalence of BPD seems to vary depending on cultural factors (for a review see Jani, Johnson, Banu, & Shah, 2016). Further research is needed to identify the factors which impact on the diagnosis (and misdiagnosis) of BPD within different cultural contexts.

1.5 Comorbidity

Patients with BPD often present with a variety of comorbid lifetime mental health diagnoses. Zanarini et al. (1998) found high rates of co-occurrence between BPD and mood disorders (96%), anxiety disorders (88%), and substance use disorders (64%) within clinical samples. Post-traumatic stress disorder (PTSD) has also been found to co-occur with BPD in clinical samples (47 -56%; McGlashan et al., 2000; Zanarini et al., 1998). Finally, rates of eating disorders among patients with BPD have been estimated for anorexia nervosa (6-21%; McGlashan et al., 2000; Zanarini et al., 1998), bulimia nervosa (13-26%; McGlashan et al., 2000; Zanarini et al., 1998), and eating disorder otherwise not specified (22-26%; McGlashan et al., 2000; Zanarini et al., 1998). The rate of being diagnosed with comorbid BPD and another personality disorder has been estimated as 24% for women and 20% for men within the community (Grant et al., 2008).

Gender differences have been found in the comorbidity of BPD, with men more likely to report a co-occurring substance use disorder (Grant et al., 2008;

Johnson et al., 2003; Tadić et al., 2009; Zanarini et al., 1998; Zlotnick, Rothschild, & Zimmerman, 2002) and antisocial personality disorder (Grant et al., 2008; Tadić et al., 2009; Zanarini et al., 1998; Zlotnick et al., 2002). In contrast, women are more likely to experience comorbid mood disorders (Grant et al., 2008; Tadić et al., 2009), anxiety disorders (Grant et al., 2008; Tadić et al., 2009), PTSD (Grant et al., 2008; Johnson et al., 2003; Zanarini et al., 1998) or an eating disorder (Johnson et al., 2003; Tadić et al., 2009; Zanarini et al., 1998; Zlotnick et al., 2002).

1.6 Prognosis

Historically, BPD was considered a chronic condition that responded poorly to interventions (Biskin, 2015). However, several longitudinal studies have explored outcomes for those diagnosed with BPD and the findings suggest that remission and recovery is possible. First, the Collaborative Longitudinal Personality Disorders Study (CLPS) followed 175 patients diagnosed with BPD at baseline and then annually for 10 years. Remission was defined as meeting less than 2 symptoms for a period of 2 months or longer. By 10 years, 91% of participants reached at least a 2-month period of remission, and 85% achieved a 12-month period of remission or longer (Gunderson, Stout, et al., 2011).

Second, the McLean Study of Adult Development (MSAD) followed 290 patients diagnosed with BPD and explored remission, defined as no longer meeting diagnostic criteria for 2 years or longer (Zanarini, Frankenburg, Reich, & Fitzmaurice, 2012). This study demonstrated that after 16 years, 91% of participants had achieved 2 years of remission, and 78% had a remission lasting 8 years. Third, Paris and

Zweig-Frank (2001) followed up patients over a 27-year period and found that 92% of the sample no longer met criteria for a diagnosis of BPD.

When considering recurrence of symptoms, the CLPS study reported that among those who achieved 12 months of remission, 11% of the sample had relapsed at the 10 year follow up (Gunderson, Stout, et al., 2011). Alternatively, the MSAD found that recurrence rates decreased depending on the length of the remission. For example, a remission period of 2 years was associated with 36% recurrence of symptoms compared to 10% recurrence for a remission period of 8 years (Zanarini et al., 2012).

Finally, the MSAD and CLPS both explored improvements in psychosocial functioning over time. Gunderson, Stout et al. (2011) found that at 10 years only 21% of those diagnosed with BPD in their sample had achieved 'good functioning' which was much lower compared to participants diagnosed with other personality disorders (48%) or Major Depressive Disorder (61%). Zanarini et al. (2012) described recovery rates defined as having a Global Assessment of Functioning (GAF) score greater than 61 (i.e. remission from personality disorder diagnosis, at least one emotionally sustaining relationship and ability to work or study consistently, competently and on a full-time basis). They found recovery rates ranging from 60% (2 years duration) to 40% (8 years duration) for those with a diagnosis of BPD. Loss of recovery ranged from 44% following 2 years of recovery to 20% for those who had achieved 8 years recovery. The authors concluded that sustained recovery is substantially more difficult for patients diagnosed with BPD compared to those diagnosed with other personality disorders (Zanarini et al., 2012). As such, they recommended that future research address the role of interventions in improving psychosocial functioning.

1.7 Aetiology

Research over the past 30 years suggests that numerous risk factors contribute to the development of BPD. Understanding the factors associated with the development of the disorder may also provide insight into potential mechanisms for the intergenerational transmission of BPD symptoms between parent and child. The following section summarises the biological, environmental and child risk factors associated with the disorder. Potential protective factors are noted. It should be noted that the literature varies in whether the participants under investigation were assessed as having a diagnosis of BPD or endorsed borderline symptoms (in which the individual may or may not have met diagnostic criteria). This thesis will consider the literature incorporating both constructs and will differentiate between ‘BPD diagnosis’ and ‘borderline symptoms’ throughout.

1.7.1 Biological factors. Biological influences such as the heritability of symptoms, intrauterine factors, and brain development, have been hypothesised as contributing to the development of BPD (Crowell, Beauchaine, & Linehan, 2009; Linehan, 1993). The following section summarises findings from family studies, twin studies, and neurobiological investigations.

1.7.1.1. Familial studies. The literature suggests that having a parent diagnosed with neurotic spectrum disorders (Bandelow et al., 2005), cluster C personality traits (Schuppert, Albers, Minderaa, Emmelkamp, & Nauta, 2012), general psychopathology (Schuppert et al., 2012), or borderline diagnosis/symptoms (Kurdziel, Kors, & Macfie, 2018; Weiss et al., 1996) is associated with a higher risk

of borderline symptoms/diagnosis in offspring compared to control groups.

Prospective studies have shown that prenatal maternal anxiety and depression at 18 weeks uniquely predicted borderline symptoms in offspring during middle childhood (Winsper, Wolke, & Lereya, 2015). Furthermore, maternal externalising symptoms (Conway, Hammen, & Brennan, 2015) and parental substance use (Stepp, Olino, Klein, Seeley, & Lewinsohn, 2013; Widom, Czaja, & Paris, 2009) were found to predict offspring borderline symptoms in adulthood. Finally, maternal borderline symptoms were shown to predict the development of offspring borderline symptoms (Barnow et al., 2013; Reinelt et al., 2014; Stepp et al., 2013).

Studies which more broadly included first-degree relatives have found significant familial aggregation of BPD among relatives of probands with BPD compared to those without, with an estimated risk ratio of 3.9 (Gunderson, Zanarini, et al., 2011). Furthermore, the literature suggests that borderline symptoms from the affective, impulsive and interpersonal clusters are elevated among relatives of probands with BPD (Gunderson, Zanarini, et al., 2011; Silverman et al., 1991; Zanarini et al., 2004). These findings suggest that even if relatives do not fulfil criteria for a diagnosis of BPD, they may still experience sub-syndromal symptoms.

1.7.1.2. Twin studies. While familial studies infer the presence of genetic contributions, they are not able to explore genetic versus shared environmental factors. Rather, this information is provided by twin studies which report heritability estimates ranging from 37% - 69% (Bornovalova, Hicks, Iacono, & McGue, 2009; Distel et al., 2008; Kendler et al., 2008; Kendler, Myers, & Reichborn-Kjennerud, 2011; Torgersen et al., 2008; Torgersen et al., 2000; Torgersen et al., 2012). Evidence from extended twin studies (which may include parents, siblings, spouses and

offspring of monozygotic and dizygotic twins) suggests that both gene-environment interaction (G x E) and gene-environment correlation are associated with the development of borderline personality traits indicating the importance of both genetic vulnerability and life events (Distel et al., 2011).

1.7.1.3. Association studies. Crowell, Beauchaine and Lenzenweger (2008) hypothesised that a child's risk for developing BPD may occur through inheriting polymorphisms from one or more genes affecting the central serotonin (5-HT) system and dopamine expression. A meta-analysis reviewing studies which have attempted to identify genes associated with the risk of developing of BPD, failed to draw any significant conclusions (Amad, Ramoz, Thomas, Jardri, & Gorwood, 2014). It was noted that the research in the field was limited by few studies, small sample sizes, and the heterogenous nature of the disorder. Further exploration of these factors was recommended (Amad et al., 2014).

1.7.1.4. Intrauterine factors. There is some evidence to suggest that patients with a diagnosis of BPD may have experienced greater exposure to adverse intrauterine events during their mothers' pregnancies. For example, Schwarze and colleagues (2013) gained retrospective reports from 100 patients with a diagnosis of BPD and 100 matched controls, and found that patients with a diagnosis were more likely to have been exposed to maternal tobacco use, medical complications, traumatic stress, familial conflicts, partnership problems, and low social support, in utero. When controlling for other factors, maternal tobacco-use and medical complications were found to be important predictors. However, the retrospective design of the study limited the ability to attribute causality.

Winsper, Wolke and Lereya (2015) conducted a prospective longitudinal study which explored prenatal adversities and the emergence of borderline personality disorder in late childhood. This study found that when controlling for other factors, prenatal anxiety (assessed at 18-weeks' gestation) and depression (assessed at 18- and 32-weeks' gestation) were significantly associated with BPD symptoms in offspring at age 11-12 years. These studies highlight the importance of considering perinatal adversities in the development of BPD.

1.7.1.5. Brain structure. Structural investigations of the brain have revealed that patients diagnosed with BPD are more likely to have bilateral volume reduction in the amygdala and hippocampus (See Nunes et al., 2009 for a meta-analytic review). In particular, Ruocco, Amirthavasagam, and Zakzanis (2012) noted an average reduction of 11% in the hippocampus and 13% in the amygdala. Reduced volume has also been observed in the frontal lobe, left orbitofrontal cortex, right anterior cingulate cortex, and right parietal cortex (Lis, Greenfield, Henry, Guilé, & Dougherty, 2007). The structural abnormalities observed in the frontal and limbic regions suggest that neurological factors may underlie impaired emotional processing and regulatory mechanisms characteristic of BPD (Krause-Utz, Winter, Niedtfeld, & Schmahl, 2014). Schulze, Schmahl and Niedtfeld (2016) also reviewed the literature and reported greater grey matter volume (BPD vs. healthy controls) in the right cerebellum and supplementary motor area, the right middle frontal gyrus and left rolandic operculum. The authors hypothesised that some of these areas may be involved in emotion suppression (Schulze et al., 2016).

1.7.1.6. Brain functioning. Schulze et al. (2016) conducted a meta-analysis of nineteen functional neuroimaging studies and noted hyperactivity of the left amygdala along with weakened responses in the bilateral dorsolateral prefrontal cortex (dlPFC) while patients with BPD (compared to healthy controls) were processing negative emotions. The authors suggested that hyperactivity in the amygdala may reflect greater salience of negative emotional information for patients diagnosed with BPD compared to healthy controls. Furthermore, the reduced response of the dlPFC may provide neural evidence for the lack of cognitive control when patients are faced with negative emotional stimuli (Schulze et al., 2016).

1.7.1.7. Brain connectivity. Research has begun to explore dynamic interactions between brain areas among patients diagnosed with BPD (Krause-Utz, Winter, et al., 2014). Specifically, alterations have been observed in resting state functional connectivity among unmedicated patients with a diagnosis of BPD compared to healthy controls. Differences were noted in the networks associated with processing negative emotions, encoding the salience of events, and self-referential thinking processing (Krause-Utz, Veer, et al., 2014). However, this is an emerging field of study and further research is required.

1.7.1.8. Neurochemistry. Research has also explored the neurochemistry of BPD. For example, it has been suggested that deficits within the central serotonin (5-HT) system may be linked to features of BPD such as suicidal and non-suicidal self-injurious behaviour, mood disorders and aggression (Crowell et al., 2008; Crowell et al., 2009). Indeed, one study found a relationship between impulsive symptoms in patients diagnosed with BPD and abnormalities in the serotonergic system (Paris et

al., 2004). Associations between the impulsivity associated with BPD and dopamine, vasopressin and monoamine oxidase (MAO) have also been proposed (Crowell et al., 2008; Crowell et al., 2009). Furthermore, links have been hypothesised between the emotional lability characteristic of BPD and acetylcholine and norepinephrine (Crowell et al., 2008; Crowell et al., 2009). However, further research is still required to test these hypotheses.

Given that chronic stress has been associated with increased hypothalamic–pituitary–adrenal axis (HPA axis) activity, associations between this area and BPD have also been proposed (Crowell et al., 2009). However, there are conflicting findings regarding the role of hormones in the HPA axis (Ruocco & Carcone, 2016). For example, while some studies demonstrate higher levels of salivary and serum cortisol concentrations in patients with BPD compared to non-psychiatric controls (Kahl et al., 2006; Lieb et al., 2004; Scott, Levy, & Granger, 2013), other studies report lower concentrations (Carrasco et al., 2018; Nater et al., 2010) or no significant difference between groups (Paris et al., 2004). In one study, women diagnosed with BPD demonstrated weakened salivary cortisol reactivity in response to a social stressor when compared to controls (Scott et al., 2013). The authors suggested that the BPD patients' reactions to stress may not have been as great as they already started with higher baseline cortisol levels.

Hormones such as baseline concentrations of serum prolactin (Atmaca, Korkmaz, Ustundag, & Ozkan, 2015) and salivary testosterone levels (Rausch et al., 2015) have been found to be higher among patients with BPD, whereas oxytocin concentrations have been found to be lower compared to controls (Bertsch, Schmidinger, Neumann, & Herpertz, 2013). Finally, changes in oestrogen were found to predict BPD symptoms in women when tracked across the menstrual cycle even

when controlling for negative affect (DeSoto, Geary, Hoard, Sheldon, & Cooper, 2003).

1.7.1.9. Autonomic risk. Finally, the functioning of the parasympathetic nervous system (PNS) has also been associated with BPD (Crowell et al., 2008; Crowell, et al., 2009). For example, heart rate variability is considered a psychophysiological indicator of the individual's capacity for emotional regulation and inhibitory control (Koenig, Kemp, Feeling, Thayer, & Kaess, 2016). Patients with BPD have demonstrated lower resting state vagal tone (measured by vagally-mediated heart rate variability; vmHRV) compared to healthy controls (Koenig et al., 2016). Further research is required to assess whether the association between lower resting state vagal tone and BPD is linked to the development of BPD or is an artefact of the disorder.

1.7.2. Environmental factors. The literature has also provided evidence for the role of environmental factors in the development of BPD. For example, research has explored disrupted attachment, parent-child relationship quality, parenting behaviours, childhood trauma, and other sociocultural factors as potential risk factors.

1.7.2.1. Disrupted attachment relationships. Attachment refers to the strong emotional bonds that occur between people, including those between infants and caregivers. Attachment theories propose that infants have a primal instinct to maintain close physical proximity (e.g. crying, smiling, vocalising, crawling etc.) to the caregiver to ensure emotional security and survival (Bowlby, 1969). The infant approaches the caregiver when they feel unsafe and the caregiver ideally provides a

‘secure base’ from which the infant can explore the world (Meyer & Pilkonis, 2005). It has been theorised that caregiver sensitivity and responsiveness exert influence on the development of secure and insecure attachment patterns (Bowlby, 1969; De Wolff & van Ijzendoorn, 1997). Furthermore, Bowlby (1973) suggested that infants develop internal working models of themselves, their attachment figures and relationships in general, which influences future relationships and self-image.

Bowlby (1969) proposed that the quality of infant-caregiver attachment could be assessed by observing the behaviours of the infant when the parent is present (e.g. whether the parent serves as a secure base providing comfort and reassurance), and the effectiveness of infant-caregiver interactions when the care-giver returns after a brief period of separation. This may be assessed using the Strange Situation Test during which infants’ exploratory and proximity-seeking behaviour is observed under three conditions 1) departure of primary caregiver; 2) introduction of stranger; and 3) reintroduction of attachment figure (Ainsworth, Blehar, Waters, & Wall, 1978).

Several attachment patterns were proposed. For example, *Secure attachment* involves a pattern of behaviour in which the infant actively seeks contact from their caregiver and is comforted in their presence when they return after a period of separation (Ainsworth et al., 1978). Secure attachment has been associated with positive peer relations, higher self-esteem and better cognitive functioning (see review by Ranson & Urichuk, 2008). Several patterns of insecure attachment were also described. For example, *Avoidant (dismissing) attachment* is a pattern in which infants do not cry when their caregiver leaves and they are slow to interact with them on their return (Ainsworth et al., 1978). *Ambivalent (preoccupied) attachment* is evident when infants’ reject and refuse to be comforted by their caregiver after their brief separation (Ainsworth et al., 1978). Finally, *Disorganised/ disorientated*

(unresolved) attachment involves inconsistent or bizarre behaviours both before separation and when being reunited with a caregiver (Main & Solomon, 1990). In general, insecure attachment styles have been associated with negative social-developmental outcomes such as aggression, hostility, social withdrawal, dependency, non-compliance, and poorer cognitive functioning (see review by Ranson & Urichuk, 2008)

Attachment difficulties have been theoretically associated with the development of BPD (Fonagy & Bateman, 2008; Meyer & Pilkonis, 2005). For example, early maternal separation (e.g. more than a month of separation before the age of five years) has been found to have an enduring impact on BPD symptom trajectory (Crawford, Cohen, Chen, Anglin, & Ehrensaft, 2009). A review of the literature demonstrated a strong association between BPD and insecure attachment, particularly unresolved, preoccupied and fearful types (Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004). However, the authors who reviewed the literature noted that these findings were limited by inconsistencies in the operationalisation and measurement of insecure attachment. It should also be noted that many people who demonstrate insecure attachment do not have BPD (Crowell et al., 2008).

Prospective research has linked attachment disorganisation at 12-18 months to increased borderline symptoms measured at 28 years of age (Carlson, Egeland, & Sroufe, 2009). However, attachment disorganisation did not independently predict borderline symptoms when controlling for other factors in this study. Likewise, infant attachment security assessed at 18 months was not found to predict borderline symptoms assessed in late adolescence (Lyons-Ruth, Bureau, Holmes, Easterbrooks, & Brooks, 2013). However, this study did find that controlling/disorganised behaviours assessed at age 8 independently predicted adolescent borderline

symptoms. Additional prospective studies are required to explore these relationships in more detail.

1.7.2.2. *Quality of parent-child relationship.* In addition to attachment studies, parent-child relationship factors such as maternal hostility, early maternal communication withdrawal, role reversal/boundary dissolution, and general family relationship quality have been investigated in relation to the development of BPD. For example, prospective studies have shown that maternal negative expressed emotion toward the child before age 10 predicted the child's borderline personality related characteristics assessed at age 12 (Belsky et al., 2012). Maternal hostility also predicted borderline characteristics when offspring were age 11 years (Wolke, Schreier, Zanarini, & Winsper, 2012) and symptoms at 28 years (Carlson et al., 2009). Finally, withdrawal of maternal communication with the infant at 18 months predicted borderline symptoms assessed in late adolescence (Lyons-Ruth et al., 2013).

Boundary violations which occur when the parent fails to acknowledge the psychological distinctiveness of the child (Kerig, 2005), have also been proposed as a developmental antecedent for BPD. For example, borderline symptoms among adolescent offspring were associated with behaviours representative of boundary violations such as parental reports of guilt induction (i.e. when children are coerced to comply with the parent's desires and expectations), psychological control (i.e. intrusive practices used to deny the child's autonomy), and triangulation (i.e. where the child is recruited to take sides or mediate marital conflict) (Vanwoerden, Kalpakci, & Sharp, 2017). However, the association between adolescent BPD symptoms and parental reports of triangulation only occurred when youth also perceived triangulation to be high. Prospective research has found that boundary

violations assessed at 42 months were associated with borderline symptoms in adulthood (Carlson et al., 2009) though it was not a significant predictor when accounting for other risks. Furthermore, maternal boundary violations observed at 18 months did not predict borderline symptoms in later adolescence (Lyons-Ruth et al., 2013).

Maternal-child discord (i.e. angry affect between mother and child, and maternal guilt induction) was also found to uniquely predict adult borderline symptoms when controlling for other features of family functioning, parental psychopathology and proband early onset psychopathology (Stepp et al., 2013). Furthermore, another study found that a family relationship quality composite score interacted with a polymorphism of the oxytocin receptor gene to predict borderline symptoms at age 20 (Hammen, Bower, & Cole, 2014). However, this only occurred among those with AA/AG genotype (not CG genotype). In contrast to the findings reported above, a recent systematic review of the literature reported that a number of other studies did not support family relationship quality as a risk factor (Stepp, Lazarus, & Byrd, 2016).

1.7.2.3. Parenting behaviours. Parenting behaviours have long been highlighted as a potential developmental antecedent for BPD. For example, several studies have shown that general measures of suboptimal parenting predict borderline symptoms in middle childhood (Winsper, Zanarini, & Wolke, 2012) through to adulthood (Cohen et al., 2008). A number of prospective studies have provided evidence for specific parenting behaviours such as harsh punishment/discipline as a predictor of later borderline symptoms (Hallquist, Hipwell, & Stepp, 2015; Stepp, Whalen, et al., 2014; Wolke et al., 2012). The evidence for the role of inconsistent parenting is mixed.

Bezirgianian, Cohen and Brook (1993) assessed adolescents for borderline personality disorder at two time points two and a half years apart and found that maternal inconsistency predicted borderline personality disorder when it occurred in the context of high maternal overinvolvement. Crawford and colleagues (2009) found that the association between inconsistent parenting in childhood and BPD symptoms in adulthood was no longer significant when accounting for attachment factors assessed during adolescence.

Prospective investigations have also demonstrated associations between affective dimensions of parenting and borderline symptoms including low warmth (Stepp, Whalen, et al., 2014), maternal dissatisfaction with child (Crawford et al., 2009) and rejection (Reinelt et al., 2014). Finally, there is also evidence to support the bi-directional relationships between parenting practices and offspring borderline symptoms. Stepp, Whalen et al. (2014) found reciprocal relationships between parenting practices (child-reported harsh punishment and low caregiver warmth) and adolescent borderline symptom trajectories.

1.7.2.4. Childhood trauma. Childhood trauma has been proposed as a risk factor for the development of BPD given that high rates of victimisation have been reported by patients with BPD. For example, Zanarini and colleagues (1997) reported specific types of trauma among patients with a diagnosis of BPD, including caretaker's verbal abuse (73%), caretaker's emotional abuse (76%), caretaker's physical abuse (59%), caretaker's sexual abuse (27%), non-caretaker's sexual abuse (56%) and caretaker's physical neglect (26%). Overall, 91% of patients diagnosed with BPD reported some form of abuse and 92% reported some form of childhood neglect. A recent retrospective cohort study found that the severity of maltreatment and the number of

subtypes of maltreatment experienced (e.g. physical abuse, neglect, sexual abuse, and emotional abuse) respectively accounted for 6% and 7% of the variance in adolescent borderline features (Kurdziel et al., 2018).

Prospective research has also identified associations between childhood maltreatment and borderline symptoms (Carlson et al., 2009; Johnson, Cohen, Brown, Smailes, & Bernstein, 1999; Lyons-Ruth et al., 2013). More specifically, physical abuse (Belsky et al., 2012; Bornovalova et al., 2013; Carlson et al., 2009; Johnson et al., 1999), sexual abuse (Bornovalova et al., 2013; Carlson et al., 2009; Johnson et al., 1999; Stepp, Scott, Jones, Whalen, & Hipwell, 2016), verbal abuse (Johnson et al., 2001), emotional abuse (Bornovalova et al., 2013) and neglect (Johnson et al., 1999; Johnson, Smailes, Cohen, Brown, & Bernstein, 2000) have been found to predict the later development of borderline symptoms. Peer-related trauma in the form of bullying victimisation has also been found to significantly predict borderline characteristics in middle childhood (Winsper, Hall, Strauss, & Wolke, 2017; Wolke et al., 2012).

Stepp, Lazarus, et al. (2016) noted that several studies failed to find associations between child abuse, neglect and the development of BPD, particularly when participant selection was based on maltreatment or incarceration status. Furthermore, it has been acknowledged that not all patients diagnosed with BPD report trauma, nor do all people who experience trauma go onto develop BPD (Ball & Links, 2009). A recent study investigating risk pathways found that girls who had the high-activity monoamine oxidase A (MAOA) genotype and a history of childhood maltreatment were more likely to experience emotional reactivity in adolescence which went onto predict BPD in early adulthood (Byrd et al., 2018). This finding suggests that the role

of environmental factors such as child abuse in the development of BPD may depend on interactions with genetic factors.

1.7.2.5. Other socio-cultural risk factors. A number of studies have investigated the link between socio-cultural risk factors and the development of BPD. For example, a family history of low socioeconomic status (Cohen et al., 2008; Crawford et al., 2009) and receipt of public assistance (Stepp, Keenan, Hipwell, & Krueger, 2014; Stepp, Whalen, et al., 2014) have demonstrated prospective associations with later BPD symptoms in several studies. However, the link between family poverty and BPD symptoms was not substantiated by Widom et al. (2009).

General measures of stressful life events (Carlson et al., 2009; Cohen et al., 2008) and family adversity (Stepp, Scott, et al., 2016; Winsper et al., 2015) have also been found to predict borderline symptoms in some studies. Assessments of specific stressful life events, such as having a parent who had been arrested in the past was found to be predictive of offspring's symptoms of BPD at age 40 (Widom et al., 2009). In contrast to these findings, stressful life events and problematic family relations in early adolescence were not associated with a BPD diagnosis four years later in one study (Greenfield et al., 2015). Stepp, Lazarus et al. (2016) noted that these contrasting results may have occurred due to differences in sampling strategies between the studies.

1.7.3. Child factors. In addition to the biological and environmental factors described above, several characteristics assessed in childhood have also been described as potential markers for the development of BPD. The next section briefly explores the influences of child temperament, cognitive functioning, and psychopathology.

1.7.3.1. Temperamental and personality risk factors. Traditionally, temperamental traits have been considered as individual differences in reactivity and regulation that are heritable and biologically based (Rothbart, 2007). However, more recently it has been proposed that temperamental characteristics may develop through complex interactions between biological and environmental factors (Depue & Fu, 2012). Crowell et al. (2009) theorised that high negative affectivity and low effortful control were linked to the development of BPD. Indeed, a meta-analysis of studies found that borderline symptoms were positively related to neuroticism and negatively to measures of conscientiousness (Saulsman & Page, 2004).

Further support is provided from prospective studies. For example, negative emotionality/ affectivity has been found to predict borderline symptoms in adolescence (Hallquist et al., 2015; Stepp, Keenan, et al., 2014; Stepp, Whalen, et al., 2014) and adulthood (Tragesser et al., 2010). Aspects of effortful control such as impulsivity and poor self-control have been found to precede borderline personality related characteristics assessed in middle childhood (Belsky et al., 2012) and predict borderline symptoms in adolescence (Hallquist et al., 2015; Jovev et al., 2013; Stepp, Whalen, et al., 2014) and adulthood (Tragesser et al., 2010). Stepp, Lazarus, et al. (2016) therefore concluded that negative affectivity and impulsivity were robust risk indicators for the development of BPD.

1.7.3.2. Cognitive functioning. Prospective research has found that lower IQ predicted borderline outcomes measured in middle childhood (Belsky et al., 2012; Winsper et al., 2012; Wolke et al., 2012) and adulthood (Cohen et al., 2008). Furthermore, poorly developed theory of mind at age five predicted more severe borderline personality related characteristics at age 12 (Belsky et al., 2012). More recently, authors failed to find a significant association between rising/elevated borderline features assessed across childhood and adolescence, and academic performance at age 8 years (Haltigan & Vaillancourt, 2016). While IQ and theory of mind may be related to the development of BPD, the findings relating to academic performance are less clear.

1.7.3.3. Psychopathology. Prospective studies have shown associations between child psychopathology and borderline symptoms at later time points. In general, internalising symptoms assessed in childhood have been found to predict borderline symptoms (Belsky et al., 2012; Conway et al., 2015). Specifically, symptoms of depression (Ramklint, 2003; Sharp, Kalpakci, Mellick, Venta, & Temple, 2015; Stepp et al., 2013; Thatcher, Cornelius, & Clark, 2005), anxiety (Sharp et al., 2015), suicidality (Stepp et al., 2013), dissociation (Krabbendam et al., 2015) and somatisation symptoms (Haltigan & Vaillancourt, 2016) increased the risk of developing borderline symptoms.

Prospective associations have also been found between externalising disorders and later borderline symptoms (Belsky et al., 2012). Specifically, conduct disorder, oppositional defiant disorder (Burke & Stepp, 2012; Stepp, Burke, Hipwell, & Loeber, 2012; Stepp, Whalen, et al., 2014), childhood ADHD (Burke & Stepp, 2012;

Haltigan & Vaillancourt, 2016; Miller et al., 2008; Ramklint, 2003; Rey, Morris-Yates, Singh, Andrews, & Stewart, 1995; Stepp, Burke, et al., 2012; Thatcher et al., 2005) and substance use disorders (Bornovalova et al., 2018; Ramklint, 2003; Stepp et al., 2013) were associated with borderline symptoms assessed at follow-up time points.

However, there are some contradictory findings. For example, depression, suicidality, conduct disorder and substance use at 15 years did not predict BPD diagnosis at 18 years (Greenfield et al., 2015). Furthermore, anxiety, depression and conduct disorder were not found to predict borderline symptoms among men (Burke & Stepp, 2012) and hyperactivity and conduct disorder were not prospectively associated with externalising disorders in a sample of female incarcerated adolescents (Krabbendam et al., 2015). Discrepancies between the findings may have occurred due to characteristics of the studies (Stepp, Lazarus, et al., 2016).

1.7.4. Protective factors. Much of the literature has focused on the role of pathological factors in the development of BPD. However, there have been some investigations into potential protective factors. For example, adolescent inpatients diagnosed with BPD were found to be significantly less likely than healthy controls to report protective factors such as engaging in sport, participating in a leadership role, participating in household activities or their parent having their own leisure activities (Borkum et al., 2017). Furthermore, another study which followed up adolescent patients after 28 years, found that low ratings on protective factors such as artistic talent, superior school performance, above average intellect and talents in other areas of special interest, independently predicted the development of a lifetime BPD diagnosis (Helgeland & Torgersen, 2004). While both of these studies demonstrated

that low levels of protective factors were associated with a BPD diagnosis, it was not clear whether high levels of these protective factors would buffer someone otherwise at risk for developing the disorder.

One study explored this question by interviewing sisters who had experienced the same childhood adversities, but where one had a diagnosis of BPD and the other did not (Paris, Perlin, Laporte, Fitzpatrick, & DeStefano, 2014). This study identified several potentially protective themes relating to resiliency such as emotional regulation skills, setting limits and boundaries against abusers, being able to identify and engage with social supports, being able to accept the past, having children of their own, and being able to focus on the future. However, longitudinal studies are required to identify potential protective factors.

1.8 A Model for the Development of BPD

As highlighted, there are numerous biological, environmental and child-related factors likely to be implicated in the development of BPD. Several theories have been proposed to explain the development of BPD. Each has supportive evidence and informs a form of psychotherapy. For example, the theory of excess aggression and transference-focused psychotherapy (TFP; Kernberg, 1967); interpersonal hypersensitivity and good psychiatric management (GPM; Gunderson & Lyons-Ruth, 2008); failed mentalisation and mentalisation-based therapy (MBT; Fonagy & Bateman, 2008; Fonagy & Luyten, 2009); maladaptive schemas and schema-focused therapy (SFT; Young, Klosko, & Weishaar, 2003); emotional dysregulation and dialectical behaviour therapy (DBT; Linehan, 1993).

The theoretical underpinnings of the current thesis are predominantly linked to Linehan's (1993) biosocial theory for the development of BPD. Biosocial theory considers the development of BPD as occurring through transactions between biological and environmental influences in line with the evidence indicating multi-factorial aetiological underpinnings for the disorder. The companion therapy, DBT, targets the core problematic behaviours associated with BPD (Linehan, 1993) and has been found to be an effective treatment (Cristea et al., 2017) with therapeutic effects extending beyond the termination of therapy (van Den Bosch, Koeter, Stijnen, Verheul, & van Den Brink, 2005). DBT has demonstrated better retention compared to treatment as usual (Linehan, Armstrong, Suarez, & Allmon, 1991) and is applicable to multi-diagnostic treatment-resistant populations (Lynch, Trost, Salsman, & Linehan, 2007). In particular, it has been proposed that DBT may enhance the effectiveness of parenting interventions among parents experiencing affect dysregulation (Ben-Porath, 2010). The following section summarises Linehan's (1993) original theory². For details regarding competing theories in the development of BPD, see review by Gunderson, Fruzzetti, Unruh and Choi-Kain (2018).

1.8.1. Linehan's biosocial theory. Linehan's (1993) biosocial theory posits that emotion dysregulation is core to BPD. It is hypothesised that problems with emotion regulation may develop in the context of biological vulnerability and exposure to invalidating environments, as well as from their interaction and transaction over time (Linehan, 1993). In the original model, it was proposed that

² Linehan's (1993) original Biosocial theory was updated in the time since the thesis commenced. Updates to the model will be addressed in the thesis discussion.

individuals diagnosed with BPD had biological predispositions to emotional vulnerability and difficulty modulating emotions. Emotional vulnerability referred to a physical sensitivity in which emotions were easily triggered, intense and slow to return to baseline arousal. Difficulty modulating emotions included an inability to distract oneself from negative emotional stimuli or chronic avoidance of negative emotion. It was hypothesised that these difficulties were likely to stem from biological predispositions such as genetic factors, intrauterine events, and the effect of early childhood events on the developing brain.

Within this model, invalidating environments were defined as those ‘in which communication of private experiences is met by erratic, inappropriate and extreme responses’ conveying that such experiences were wrong, unimportant or socially unacceptable (Linehan, 1993, p. 49). Invalidation environments were hypothesised to adversely impact on the individual’s capacity to label internal experiences or modulate them; a poor ability to tolerate distress; development of unrealistic goals/expectations; an inability to trust one’s own emotional and cognitive experiences; and poor problem-solving skills. It was noted that an extreme emotional display or crisis was required to garner a helpful response from an invalidating environment. Linehan’s (1993) model was transactional in nature, in that both the child and caregiver shaped and reinforced maladaptive responses within each other. These maladaptive responses strengthened the invalidating environment, and this resulted in more extreme behaviours. Specifically, if extreme displays of emotions were attended to, and moderate expressive behaviours were punished, it was anticipated that over time the individual would learn to oscillate between inhibition of emotions and extreme emotional lability.

Linehan's (1993) theory also described the interrelationship between emotional dysregulation and borderline behaviour patterns. For example, suicidal and impulsive behaviours were viewed as maladaptive attempts to regulate intense negative emotions. The inability to self-regulate emotions and problems managing anger were likely to result in chaotic and unstable interpersonal relationships. Unpredictable emotional lability could lead to cognitive inconsistency and unpredictable behaviour resulting in failure to develop a stable sense of identity. Furthermore, Linehan (1993) noted that the tendency of individuals diagnosed with BPD to inhibit emotions may contribute to feelings of 'numbness' further compounding problems in developing a stable sense of self.

1.9 Treatment

As mentioned previously, contemporary research into the prognosis of BPD has indicated that remission and recovery is achievable (Gunderson, Stout, et al., 2011; Paris & Zweig-Frank, 2001; Zanarini et al., 2012). Numerous psychological therapies have been developed or adapted to treat BPD including dialectical behaviour therapy (DBT), transference-focused psychotherapy (TFP), schema-focused therapy (SFT), mentalisation-based therapy (MBT), cognitive behaviour therapy (CBT), acceptance and commitment therapy (ACT), interpersonal psychotherapy (IPT), mindfulness-based cognitive therapy (MBCT), and psychoeducation among others.

Several reviews have attempted to summarise the treatment efficacy data. Most recently, the Australian Psychological Society (2018) reviewed the psychological intervention literature for the treatment of BPD. This review identified psychodynamic therapy, schema therapy and DBT as having the most robust

evidence³ when treating adults diagnosed with BPD. A brief description of psychodynamic approaches and schema therapy in the treatment of BPD is noted below. In line with the current thesis' theoretical underpinnings being linked to Linehan's (1993) biosocial theory, a more in-depth description of DBT is provided. It should be noted that given the current thesis focuses on psychological treatments of BPD, pharmacological treatments of the disorder are not reviewed (for a review of pharmacological treatment recommendations see NHMRC, 2012).

1.9.1. Psychodynamic approaches. Two psychodynamic approaches, transference-focused psychotherapy (TFP) and mentalisation-based psychotherapy (MBT) have been manualised and evaluated in randomised control trials (RCTs) and are recommended for the treatment of BPD. Each is organised around a capacity that is theorised to be deficient in patients with BPD.

1.9.1.1. Transference-focused psychotherapy (TFP). Based on Kernberg's (1967) theory of excess aggression, TFP aims to support patients to integrate the internalised experiences of maladaptive early relationships (Doering et al., 2018). In doing so, the therapy examines the major emotionally charged themes that emerge from the patient-therapist relationship, known as the 'transference relationship'

³ This literature review utilised the Australian Government's National Health and Medical Research Council (NHMRC) evidence hierarchy to report research outcomes. According to this hierarchy the most robust evidence is rated 'Level I' and includes a meta-analysis or a systematic review of level II studies that included a quantitative analysis. Level II studies included an independent, blinded comparison with a valid reference standard, among consecutive persons with a defined clinical presentation.

(Clarkin, Levy, Lenzenweger, & Kernberg, 2007). Typically, patients attend 50-minute sessions twice a week aimed at reducing impulsivity, stabilising moods and improving interpersonal and occupational functioning (Doering et al., 2018). An RCT involving one year of TFP with patients diagnosed with BPD demonstrated improvements in depression, anxiety, global functioning, social adjustment, suicidality and anger (Clarkin et al., 2007).

1.9.1.2. Mentalisation-based therapy (MBT). Mentalisation is defined as ‘the process by which we make sense of each other and ourselves, implicitly and explicitly, in terms of subjective states and mental processes’ (Bateman & Fonagy, 2010, p. 11). It has been hypothesised that mentalisation becomes unstable in patients diagnosed with BPD during emotional arousal (Fonagy & Bateman, 2008). Bateman and Fonagy (2016) manualised mentalisation-based therapy (MBT) which aimed to increase the patient’s capacity to identify their feelings and thoughts, as well as those of others. It was theorised that increased mentalisation would improve affect regulation, subsequently decreasing suicidality, self-harm and interpersonal chaos.

Therapy is typically offered twice weekly and alternates between individual and group sessions over the course of 18 months. An RCT found that both MBT and structured clinical management (SCM; a protocol-driven approach delivered by non-specialist practitioners which is close to supportive case management, advocacy support and problem-oriented psychotherapeutic interventions) resulted in significant improvement on measures of suicidality, self-harm, hospitalisation, social and interpersonal functioning (Bateman & Fonagy, 2009). In stating this, there was a steeper decline on measures of suicide attempts and hospitalisation within the MBT condition.

1.9.2. Schema-focused therapy (SFT). Based on the work of Young, Klosko and Weishaar (2003) SFT aims to identify and change maladaptive schemas and associated coping strategies. Early maladaptive schemas refer to the pervasive negative beliefs that people have developed about themselves, others and the world and are considered to develop early in life when basic needs are not met. They are defined as broad patterns of thoughts, emotions, memories and attention tendencies (Young et al., 2003). When an early maladaptive schema is triggered it is hypothesised that the person will experience the associated negative emotion and coping strategies such as surrendering, avoiding or over-compensating (Jacob & Arntz, 2013). The emotional state that follows the activation of the schema is determined by the method of coping. These are understood in terms of four broad schema modes: 1) dysfunctional child modes; 2) dysfunctional (punitive or demanding) parent modes; 3) dysfunctional coping modes; 4) healthy child and parent modes.

Arntz and van Genderen (2009) described a model for BPD which contains the abandoned/abused child mode (related to intense negative emotions), angry/impulsive child mode (anger outbursts/impulsive behaviours), punitive parent mode (self-devaluation and self-punishment) and detached protector mode (emotional avoidance strategies such as substance abuse, dissociation and social withdrawal). Schema-focused therapy aims to identify the modes currently activated because of life problems and employs a combination of cognitive and experiential strategies to facilitate change (Jacob & Arntz, 2013). The therapist offers a direct corrective relational experience referred to as ‘limited reparenting’, in which they validate

coping modes, challenge parent modes, support child modes as well as teach and model healthy modes.

A meta-analysis of five studies evaluating schema therapy have found a large effect size for pre-post change on measures of BPD psychopathology (Jacob & Arntz, 2013), with larger effect sizes associated with longer treatment duration (i.e. 18-36 months).

1.9.3. Dialectical behaviour therapy (DBT). Linehan (1993) modified standard cognitive behavioural behaviour by adding a dialectical worldview to address the extreme polarised thinking and behavioural patterns characteristic of BPD. A dialectical perspective aims to synthesise these polarities to assist patients towards more flexible thinking and to develop new solutions in the context of complex life problems (Linehan, 1993). The treatment approach involves a careful balance of validation and problem-solving to support the patient towards building a ‘life worth living’. The therapy functions, modalities, behavioural targets, and therapeutic strategies are summarised below.

1.9.3.1. Five functions. Comprehensive DBT programs incorporate five functions. The first function is to *enhance capabilities* specifically in improving life skills such as the ability to regulate emotions, being present in the moment, navigating interpersonal relationships and tolerating distress during crises. The second function is to *generalise capabilities* to the patient’s natural environment. Third, DBT aims to *improve motivation and decrease dysfunctional behaviour*. The fourth function is to *enhance the therapist’s capabilities and motivation to work with the patient*, particularly in the face of challenging behaviours that may result in therapist burnout.

Finally, the fifth function is to *structure the environment* in a way that reinforces effective behaviour, rather than maladaptive coping strategies. This may involve structuring the treatment to result in the most progress.

1.9.3.2. Therapy modalities. Traditionally, DBT prescribes four modalities for treatment (Linehan, 1993). The first is individual therapy, which occurs weekly and is recommended over the course of treatment. The role of the individual therapist is to help the patient inhibit impulsive and self-destructive behaviours and to replace them with more skilful responses. Sessions tend to be organised around a hierarchy of treatment targets. In addition to individual therapy patients are required to attend weekly DBT skills training groups in which they are taught core skills in mindfulness, distress tolerance, emotion regulation and interpersonal effectiveness.

Phone coaching is offered between therapy sessions which aims to assist with the generalisation of effective coping skill use in real time; to teach patients to ask for help effectively; and provides patients a mechanism to repair the therapeutic relationship when conflicts or misunderstanding occur. Finally, the therapist is required to attend weekly case consultation team meetings which aim to reduce the likelihood of therapist burnout and address problems that can arise in the delivery of treatment.

Traditionally, all four modalities are required for the program to be considered adherent to the DBT model. A recent component analysis tested this theory by comparing standard DBT (i.e. individual therapy plus DBT skills training group) to DBT skills training group plus case management (DBT-S) and individual therapy plus an activity group (DBT-I) (Linehan et al., 2015). All three conditions were effective in reducing suicidality among high risk individuals. Furthermore, the two

interventions that included DBT skills training group (standard DBT and DBT-S) showed greater reductions in non-suicidal self-injurious (NSSI) acts and anxiety and depressive symptoms, compared to stand-alone individual therapy.

1.9.3.3. Behavioural targets. DBT outlines a clear hierarchy of primary behavioural treatment targets (Linehan, 1993). The first set of targets relates to reducing life-threatening behaviours including suicide crisis behaviours, non-suicidal self-injurious acts, suicidal ideation and communications, suicide-related experiences and beliefs, and suicide-related affect. The second target is therapy-interfering behaviours and includes behaviours that reduce the effectiveness of therapy and may include patients' behaviours that are non-attentive, noncompliant, which interfere with other patients or burnout the therapist.

The third target area is to decrease behaviours that are seriously problematic and interfere with quality of life. Examples may include substance abuse, high-risk sexual behaviour, criminal behaviour, dysfunctional relationships, vocational issues, accommodation problems, physical health problems, and treating co-morbid mental health conditions. The fourth area of targets relates to increasing the behavioural strategies which are taught in the skills training programs as well as self-management skills. The fifth area is decreasing behaviours related to posttraumatic stress followed by the final target area, increasing respect for self.

Linehan (1993) also noted a number of secondary behavioural targets which should be addressed if they have a functional relationship to the pattern of primary targets. These secondary targets include increasing emotional modulation, self-validation, realistic decision-making and judgement (as opposed to crisis-generating

behaviours), emotional experiencing, active problem-solving, and accurate expression of emotions.

1.9.3.4. Therapeutic strategies. There are a number of therapeutic strategies that are utilised across the modalities (Linehan, 1993). First, *dialectical strategies* permeate throughout the treatment. A dialectical perspective ‘views reality as wholistic process in a state of constant development and change’ (Linehan, 1993; p. 201). The therapist aims to develop and maintain a collaborative working relationship with the patient by paying attention to dialectics within the therapeutic relationship and balancing acceptance and change strategies. The therapist also aims to teach dialectical behaviour patterns, modelling these to the patient throughout treatment.

Second, *core strategies* include validation and problem-solving. Validation is a strategy central to DBT treatment. It involves communicating to the patient that their behaviour makes sense within the current context. It involves helping the patient to understand their thoughts, feelings, and emotions and communicates acceptance. In contrast, problem solving focusses on change. The therapist supports the patient to analyse their own behaviour and commit to changing it, with a detailed plan of how to action this. Chain analysis is used to analyse problem behaviour and solution analysis is employed to develop more adaptive responses.

The therapy also specifies stylistic factors with a focus on *communication strategies*. The two primary communication styles in DBT are reciprocity and irreverence. Reciprocity is characterised by responsiveness, warmth, and genuineness. In contrast, irreverence is brazen and attempts push the patient off balance and get their attention with the aim of introducing a new point of view. The therapist balances

irreverent and responsive strategies to develop the relationship and support the patient towards change.

Fourth, DBT outlines *case management strategies* which refers to how the therapist engages with the environment outside the patient-therapist relationship. The therapist aims to utilise ‘consultation-to-the-patient’ strategies teaching them to manage their own life problems. However, the therapist may intervene and provide environmental interventions when there is substantial risk to the patient and when the patient does not have the power or capability to act.

Finally, *structural strategies* outline how the therapist structures time during therapy sessions and the different phases of treatment. Collaborative treatment contracts are developed at the onset of therapy which outline responsibilities of both the patient and therapist. The treatment hierarchy is utilised to organise session time in individual therapy sessions. This task is aided using diary cards which help to monitor impulsive/self-destructive behaviours and use of coping skills in between sessions. Structures are also recommended for phone coaching and case consultation.

1.9.3.5. Treatment applications. In addition to demonstrating efficacy in reducing self-directed violence and crisis presentations (DeCou, Comtois, & Landes, 2019) DBT has been adapted and been found to be effective for treatment of special populations including substance dependence for those with BPD (Dimeff, Rizvi, Brown, & Linehan, 2000), bulimia nervosa/binge-eating (Chen et al., 2017; Hill, Craighead, & Safer, 2011); PTSD (Bohus et al., 2013), children with behavioural problems (Perepletchikova et al., 2011), adolescents experiencing depression, anxiety, self-injury or suicide risk (Hunnicutt Hollenbaugh & Lenz, 2018), families of patients

diagnosed with BPD (Hoffman, Fruzzetti, & Buteau, 2007) and elderly patients with depression (Lynch, Morse, Mendelson, & Robins, 2003).

1.10 BPD and Implications for Parenting.

The following section explores how the core features and proposed aetiology of BPD may create challenges for parenting and present risk factors for offspring. When this research program was commenced in 2010, there were few studies regarding the rates of parenthood among those with a diagnosis of BPD despite it being highlighted as an area of concern in the literature. Several studies have emerged since this time. For example, Australian surveys of consumers with a diagnosis of BPD have found rates of parenthood ranging between 41% (n= 418; Lawn, McMahon, & Zabeen, 2017) and 51% (n= 146; McMahon & Lawn, 2011). People diagnosed with BPD who had one or no children, were more likely to be single, while those with two or more children were more likely to be partnered (Lawn et al., 2017; McMahon & Lawn, 2011). Australian data also suggested that one in five admissions to a mother-baby unit over an 18-month period, were for mothers with a diagnosis of BPD (Yelland, Girke, Tottman, & Williams, 2015). Furthermore, a recent study in the USA which compared rates of parenthood between community members who met the criteria for BPD (n= 164) to those that did not (n= 902) found no significant difference between the groups (Javaras et al., 2017).

Zanarini and colleagues (2015) explored rates of parenthood and associations with the prognosis of BPD. These researchers reported outcomes for 231 patients who were assessed at first admission and then every 2 years for a 16-year period. Overall, 40.3% of the sample had a child or had raised one. Furthermore, parents who

were classified as ‘recovered’ (i.e. a GAF score of 61 after 2 years) were significantly more likely to have raised a child and were older when first having a child, compared to the non-recovered group. Sadly, parents in the non-recovered group were 7 times more likely to lose or relinquish custody of their children. These findings suggest that patients with a diagnosis of BPD who achieve recovery, can achieve stability in the domain of parenting. However, this study was limited as it only explored factors relating to custody as the outcome measure. The quality of the parent-child relationship and child outcomes were not explored, nor were factors that may have mediated the association between recovery and parenthood such as treatment.

The literature has drawn theoretical associations between the core features of BPD, hypothesised etiological pathways, and parenting challenges. For example, affective instability due to a marked reactivity of mood and parents’ difficulties in recognising and modulating their emotional experience is likely to make it difficult for parents with a BPD diagnosis to model appropriate emotional socialisation strategies to their own children (Stepp, Whalen, et al., 2012a). This may put children of parents with a diagnosis of BPD at risk of learning maladaptive coping strategies.

Difficulties managing inappropriate or intense anger may also result in maternal hostility, negative expressed emotion, and harsh punishment/discipline, all factors which have been identified as possible precursors to the development of borderline symptomology (Belsky et al., 2012; Carlson et al., 2009; Hallquist et al., 2015; Wolke et al., 2012). These factors may leave the child vulnerable to physical or emotional abuse, or at risk of replicating these behaviours when they themselves feel frustrated or angry. As mentioned, affective personality traits have been found to be higher among first-degree relatives with BPD compared to controls, suggesting that

offspring may be at greater risk of inheriting such vulnerabilities (Silverman et al., 1991).

Parental symptoms of behavioural dysregulation such as impulsivity and recurrent suicidal behaviour (e.g. gestures, threats, or self-mutilating behaviour) may contribute to an unstable and unsafe environment for children if they are exposed to these behaviours. Furthermore, the potential consequences of these behaviours including incarceration, hospitalisation, child protection involvement, permanent physical disability and potential death may lead to prolonged maternal absences and disruptions to attachment, both hypothesised as potential precursors in the development of BPD (Carlson et al., 2009; Crawford et al., 2009). As mentioned previously, impulsive personality traits have also been found to be higher among first-degree relatives of probands diagnosed with BPD, indicating a biological vulnerability for offspring (Silverman et al., 1991). Given the bi-directional nature of parenting, a child with a difficult temperament may also be an additional stressor for a parent with a diagnosis of BPD (Ben-Porath, 2010).

When considering dysregulation in the interpersonal domain, frantic efforts to avoid real or imagined abandonment may result in problematic relational patterns with infants and children particularly if the parent's abandonment fears are triggered by developmentally appropriate behaviours that signal individuation (Apter-Danon & Candilis-Huisman, 2005; Lawson, 2000). Furthermore, unstable and intense interpersonal relationships characterised by alternating between extremes of idealisation and devaluation may impact on the parent's perception of self and parenting ability, resulting in poor parental self-efficacy, which has been linked to parental competence and child adjustment (Jones & Prinz, 2005). If the mother's view of the child oscillates between good-and-bad poles, the child may experience identity

confusion (Lawson, 2000). Lawson (2000) also noted that polarised views could develop between siblings where the all-bad child is at risk of denigration whilst an all-good child may be at risk for parentification. Both pathways may have negative implications for the child's emotional development.

As mentioned previously, patients with a diagnosis of BPD are more likely to be classified as having insecure attachment (Agrawal et al., 2004). Given that research indicates that adult attachment status is associated with maladaptive parent-child interaction patterns (Crandell, Fitzgerald, & Whipple, 1997) parents with a diagnosis of BPD and their offspring may be at risk of insecure attachment. Furthermore, levels of oxytocin during early pregnancy and in the post-natal period have been associated with mother-infant bonding behaviours including attachment-related cognitions (Feldman, Weller, Zagoory-Sharon, & Levine, 2007). Given oxytocin concentrations have been found to be disturbed among females with a diagnosis of BPD (Bertsch et al., 2013), this could represent a neurological basis for parenting disturbance in this population. However, research has not yet directly explored this hypothesis among parents with a diagnosis of BPD.

Symptoms relating to self and cognitive dysregulation are also likely to permeate the parent-child relationship. If the parent experiences a markedly and persistently unstable sense of self this may have a negative impact on the child's developing self-image (Lamont, 2006). Furthermore, chronic feelings of emptiness may result in the parent being emotionally vacant within the relationship, or alternatively the child may become the means for filling this void (Apter-Danon & Candilis-Huisman, 2005). Transient, stress-related paranoid ideation or severe dissociative symptoms may interfere with the parent's ability to attend to their child's needs presenting a risk to young children if the parent becomes incapacitated (Lawson, 2000). Finally, cognitive

disturbances impacting memory may mean that the parent doesn't remember events significant to the child, negating that child's experience, and thus perpetuating invalidating environments (Lawson, 2000).

In sum, the symptoms of BPD are likely to present challenges for the parenting role and leave the child vulnerable to emotional and behavioural difficulties, potentiating intergenerational transmission of BPD from parent to child.

1.11 Chapter Summary

The current chapter provides a background understanding of BPD. It is evident that BPD is a pervasive condition, likely to present with co-morbid conditions, psychosocial dysfunction and significant distress for the sufferer and their family. The disorder is associated with high service utilisation across a variety of contexts and therefore comes with an economic cost to society (Ansell et al., 2007). Sadly, it is estimated that approximately 1 in 10 patients will successfully commit suicide, a devastating human cost to family members (Paris & Zweig-Frank, 2001). While there is encouraging data regarding remission of BPD symptoms over time (Gunderson, Stout, et al., 2011; Paris & Zweig-Frank, 2001; Zanarini et al., 2012), improvement in psychosocial functioning may be less promising with patients still struggling in areas of social functioning (Gunderson, Stout, et al., 2011; Zanarini et al., 2012). Hence, interventions aimed at improving psychosocial functioning are warranted.

The aetiology of BPD was reviewed and is likely to involve a complex interaction between biological and environmental influences. Several aetiological models were summarised, and it was noted that many of the antecedents associated with the development of BPD are likely to be shared with offspring, increasing the potential

for the transgenerational transmission of BPD. As such, parent-child interactions in families where a parent is diagnosed with BPD is a potentially important area for early intervention.

This chapter briefly reviewed the treatment approaches which have the most robust supportive evidence to-date. While interventions for BPD are effective in improving some aspects of functioning, in general improvements in parenting behaviours or the parent-child relationship have not been assessed. The current thesis aims to identify parenting challenges for parents with a diagnosis of BPD to assist the development of intervention programs. The next chapter of this thesis will explore parenting and mental illness in more detail with a specific focus on empirical investigations into the impact of BPD on parenting and outcomes for children. Chapter 2 will also explore the literature relating to relevant parenting interventions.

Chapter 2: Parenting and Borderline Personality Disorder

2.1 Preamble

To understand the impact of a diagnosis of Borderline Personality Disorder (BPD) on parenting, it is important to first understand theories underlying parenting and child development. This chapter will review definitions of parenting and related concepts and then narrow in on the impact of parental mental health on child development and parenting. Finally, the chapter will specifically focus on parenting with a diagnosis of BPD and the potential impact on offspring, considering the literature prior to the commencement of this PhD in 2010 and that which has emerged over the past decade. This chapter concludes with a summary of the thesis aims.

2.2 Parenting: What is ‘good-enough’?

There is a plethora of literature exploring ‘parenting’ with the aim of determining factors that impact on developmental outcomes for children. Hoghugh and Speight (1998) defined parenting as a process in which the person is involved in the care, control and development of a child. Winnicott (1957, 1964) proposed that parenting did not need to be perfect, rather ‘good-enough parenting’ was sufficient. Indeed, Bettelheim (1987) described good enough parenting as follows:

In order to raise a child well one ought not to try to be a perfect parent, as much as one should not expect one’s child to be, or to become, a perfect individual. Perfection is not within the grasp of ordinary human beings.

Efforts to attain it typically interfere with that lenient response to the imperfections of others, including those of one's child, which alone make good relations possible [...]. But it is quite possible to be a good enough parent – that is, a parent who raises his child well. To achieve this, the mistakes we make in rearing our child – errors often made just because of the intensity of our emotional involvement with our child – must be more than compensated for by the many instances in which we do right by our child (Bettelheim, 1987, p. xi).

Hoghugh and Speight (1998) suggested that good enough parenting involved meeting the child's needs by providing physical care, protection, nutrition, love/care and commitment, control/consistent limit setting, and through the facilitation of development. More recently, Eve, Byrne and Gagliardi (2014) surveyed professionals who utilised parenting capacity assessments in their work (i.e. social workers, psychologists, lawyers and magistrates) to identify what factors they used to judge 'good parenting'. The professionals agreed upon six key themes: insight (i.e. knowing the individual child and acknowledging one's own parenting limitations); willingness and ability (i.e. willing to parent at all times and improve parenting skills, as well as being aware of children's basic needs and able to provide for them); day-to-day versus complex/long-term needs (i.e. ability to address the basic day-to-day physical, cognitive and emotional needs of the child as well as meeting their long-term needs enabling them to develop into a well-adjusted person); ability to put the child's needs before their own (i.e. prioritising the child's needs which may include sacrifice and protection); fostering attachment (i.e. the need for parents to develop attachment with their child by providing comfort, nurturing and sensitively

responding to the child); and consistency vs flexibility (i.e. the ability to balance consistent parenting approaches with the need to be flexible when a different approach is needed).

Adshead (2015) outlined a number of psychological capacities that parents needed to provide ‘good-enough parenting’. These included distress tolerance skills, planning abilities, ability to respond empathetically to another’s distress, compassion, capacity to tolerate negative emotions without responding impulsively, the ability to tolerate uncertainty and delay gratification, help-seeking, being able to work with others involved in the child’s care, and a sense of humour. These capacities may be strained for any parent when life stressors occur (e.g. unemployment, bereavement, relationship breakdown, illness) but may also be impacted by parental mental illness (Adshead, 2015).

Belsky (1984) also considered the potential importance of the marital relationship, social supports, and employment in influencing parenting and thereby child development. Parents within high-stress and low-support environments may face significant challenges which impact on their resources for parenting (Dix, 1991). Choate and Engstrom (2014) reviewed the literature and noted that socio-environmental factors such as community safety, family safety (e.g. exposure to domestic violence) and the ability to connect with the child’s external networks (e.g. schools, community) were also important factors when considering good enough parenting in child protection matters.

Finally, the literature also suggests that parent-child socialisation processes are bi-directional (Pettit & Arsiwalla, 2008). For example, a longitudinal study of adolescent girls found that problem behaviour (i.e. externalising symptoms and substance abuse) was a more consistent predictor of parenting (i.e. perceived parental

control and support) than parenting was of adolescent problem behaviour (Huh, Tristan, Wade, & Stice, 2006). Furthermore, another study found time-specific increases in borderline symptoms among adolescent girls predicted increases in perceived care-giver harsh punishment and low warmth, providing support for the bi-directional nature of these interactions (Stepp, Whalen, et al., 2014). However, it should be noted that these findings occurred in relation to adolescent reports of parenting practices which is a potential limitation of this study.

In sum, theories of child development tend to be transactional in nature, taking into consideration dynamic interactions between parents, children and the social context (Pettit & Arsiwalla, 2008). This thesis considers parenting from a ‘good-enough’ perspective rather than holding parents to standards of perfection. The complexity of the topic is acknowledged, and this work does not intend to account for all factors but aims to shed light on some facets of the phenomenon.

2.3 Parenting and Child Development

As mentioned, parenting is a complex phenomenon likely to be influenced by child and environmental factors. However, the literature has explored several parenting factors which may impact on child development. This section will briefly explore some of the key concepts referred to in this thesis. It should be noted that this is by no means an exhaustive list. Furthermore, concepts such as attachment theory (Chapter 1, page 30) and boundary dissolution (Chapter 3, page 124) have been defined elsewhere in the thesis and will not be repeated here.

2.3.1. Parenting styles. Darling and Steinberg (1993) conceptualised parenting styles as the ‘emotional climate’ in which parents raise their children. While there has been debate in the literature regarding the most appropriate way to classify parenting (i.e. parenting styles vs dimensional or domain-specific approaches; Smetana, 2017) and an expansion on the number of proposed styles (Maccoby & Martin, 1983), Baumrind’s (1967) original conceptualisation is commonly cited in the literature. This theory proposed three parenting typologies: authoritative, authoritarian and permissive parenting styles (Baumrind, 1967). These styles are characterised along two dimensions of demandingness (i.e. degree of parenting control, supervision and demand) and responsiveness (i.e. degree of parental affection and involvement).

2.3.1.1. Authoritative parenting. This parenting style is described as demanding but also highly responsive (Robinson, Mandleco, Olsen, & Hart, 1995). Authoritative parents are characterised as warm, actively involved in their child’s life, they provide reasoning for rules, encourage democratic participation and respect their child’s opinions (Robinson et al., 1995). Olivari, Tagliabue, and Confalonieri (2013) reviewed the literature on parenting styles and found that authoritative parenting was positively related to adaptive behaviour, psychological and interpersonal characteristics in children. Furthermore, this parenting style was negatively associated with children’s externalizing behaviours, hyperactivity/ inattention and distress. It has been hypothesised that authoritative parenting is protective as parents are more likely to model empathy, healthy interpersonal boundaries and validate their child’s feelings (Nelson, Coyne, Swanson, Hart, & Olsen, 2014). As a result, children of authoritative parents may be more likely to develop adaptive emotional regulation skills.

2.3.1.2. Authoritarian parenting. This parenting style is described as demanding and characterised by verbal hostility, directive communication, and corporal punishment (Robinson et al., 1995). Authoritarian parents enforce strict rules and punitive strategies are utilised to enforce compliance. These parents are characterised as less empathetic and warm and this style of parenting has been found to be associated with increases in children's symptoms of dysregulation, hyperactivity and both internalising and externalising behaviours (Olivari et al., 2013).

2.3.1.3. Permissive parenting. This style is characterised as warm and responsive but non-controlling and non-demanding (Baumrind, 1967). Characteristically, permissive parents do not follow through on limit-setting, ignore children's misbehaviour, and have poor confidence in their ability to parent (Robinson et al., 1995). Permissive parenting has been positively associated with maladaptive child behaviour such as aggression, dysregulation, psychological distress and externalising or internalising symptoms (Olivari et al., 2013). Nelson and colleagues (2014) hypothesised that permissive parents, whilst warm, may inadvertently communicate that boundaries are less important than the pursuit of close relationships. The authors also proposed that children of these parents may develop characteristics such as jealousy, clinginess and neediness.

2.3.2. Parenting practices and competencies. In contrast to broader classifications of parenting style, parenting practices are conceptualised as the specific behaviours that parents use to socialise their children (Darling & Steinberg, 1993). For example, helping children with their homework or using time-out are both examples of parenting practices. Parenting skills refer to the ability and skills needed

to be an effective and supportive parent. Numerous parenting programs attempt to operationalise ‘parenting skills’ in order to teach strategies to enhance parenting experience and child outcomes. For example, the Triple P parenting program (Sanders, 2008) specifies a number of core parent-child relationship enhancement skills which include: encouraging desirable behaviour, teaching new skills and behaviour, managing misbehaviour, and anticipating and planning. This program also highlights enhanced parenting skills including self-regulation, mood and coping, and partner support skills (Sanders, 2008).

There is a large array of sources that attempt to define parenting skills and the vast amount of information can be overwhelming for parents (Epstein, 2010). In an attempt to try and consolidate the research Epstein (2010) asked 2,000 parents about the skills they used and explored which practices best predicted child outcomes. Epstein (2010) reported ten top parenting competencies ranked from most to least important based on the results of parent surveys and expert opinion:

Table 2 - Ten Competencies that Predict Good Parenting Outcomes (Epstein, 2010, p. 49)

1. Love and Affection	You support and accept the child, are physically affectionate, and spend quality one-on-one time together.
2. Stress management	You take steps to reduce stress for yourself and your child, practice relaxation techniques and promote positive interpretations of events.
3. Relationship skills	You maintain a healthy relationship with your spouse, significant other or co-parent and model effective relationship skills with other people.
4. Autonomy and independence	You treat your child with respect and encourage him or her to become self-sufficient and self-reliant.
5. Education and learning	You promote and model learning and provide educational opportunities for your child.
6. Life skills	You provide for your child, have a steady income and plan for the future.
7. Behaviour management	You make extensive use of positive reinforcement and punish only when other methods of managing behaviour have failed.
8. Health	You model a healthy lifestyle and good habits such as regular exercise and proper nutrition, for your child.
9. Religion	You support spiritual or religious development and participate in spiritual or religious activities.
10. Safety	You take precautions to protect your child and maintain awareness of the child's activities and friends.

It should also be noted that parenting practices and the values placed on certain competencies may vary between cultures. For example, diverse parenting practices have been noted among Australian Aboriginal communities in domains such as sleep and feeding, learning and education, relationships, self-worth and identity, and emotional regulation (Heath, Bor, Thompson, & Cox, 2011). While parenting within Aboriginal and Torres Strait Islander families varies across cultural contexts, common features include connectedness to specific areas of land, clear beliefs and values that outline cultural and social responsibilities, with identity being strongly linked to kinship, family and the community (Heath et al., 2011).

2.3.3. Parental empathy. A characteristic gaining increasing attention as a potential determinant of parenting is parental empathy (Crocetti et al., 2016). Kilpatrick (2005) defined parental empathy as the parent's ability to notice their child's signals, make accurate attributions about the cause of the child's feelings, and to experience positive child-focussed emotions, followed by child-focused helpful behaviours (Kilpatrick, 2005). It has been hypothesised that the capacity to understand and respond to a child's needs may enhance parent-child relationship quality as well as impact on the child's developmental outcomes (Crocetti et al., 2016). Parents with higher levels of empathy may have a greater capacity to tune in and respond to their child's needs facilitating a more supportive parenting style (Dix, 1991).

Research has shown that perceived parental empathy predicted higher self-esteem and lower depression among young adults (Trumpeter, Watson, O'Leary, & Weathington, 2008). Low levels of general dispositional empathetic concern have also been demonstrated among parents identified as at high-risk of committing child

physical abuse (Perez-Albeniz & de Paul, 2003). However, the literature is mixed, with another study failing to find significant differences in dispositional empathy (e.g. empathetic concern, perspective-taking, and distress) when comparing neglectful and non-maltreating parents (de Paúl, Pérez-Albéniz, Guibert, Asla, & Ormaechea, 2008). Due to mixed results in studies assessing dispositional empathy, another study assessed empathy using an analogue task and confirmed that parental empathy was associated with physical abuse risk when the parent was asked to observe and imagine their own child's reactions, and to assume the child's perspective (Rodriguez, 2013).

2.3.4. Parenting cognitions: self-efficacy, competence and satisfaction.

The literature has explored parenting cognitions and their relationship to parenting and child developmental outcomes. One construct that has received interest is parenting self-efficacy (PSE) which is defined as 'the degree to which the parent feels competent and confident in handling child problems' (Johnston & Mash, 1989, p. 167). Similar to the concept of PSE, *parental competence* also refers to the capacity to complete a task successfully (Wittkowski, Garrett, Calam, & Weisberg, 2017). However, the latter is based on others' judgements of whether the parent achieves this or not. Reviews of the literature have surmised that high PSE is associated with adaptative parenting practices, strategies and behaviours (Coleman & Karraker, 1998; Jones & Prinz, 2005). The association between PSE and parenting is likely to be transactional, with PSE potentially functioning as an antecedent and a consequence (Jones & Prinz, 2005).

Parent's appraisals of *satisfaction* with parenting have also been associated with child outcomes (Johnston & Mash, 1989). For example, poor parenting satisfaction has been associated with increased internalising and externalising

symptoms among children (Johnston & Mash, 1989; Ohan, Leung, & Johnston, 2000). Furthermore, high parental satisfaction was associated with an ‘easy-going’ parenting style, as assessed using the child-rearing practice report (Ohan et al., 2000). There is also evidence that both PSE and parenting satisfaction are amenable to change. For example, a meta-analysis of the Triple-P parenting program outcomes found both short- and long-term improvement (i.e. medium effect size) on measures of PSE and parenting satisfaction across different levels of intervention (Sanders, Kirby, Tellegen, & Day, 2014). A separate analysis of father’s data also indicated improvement in PSE and parenting satisfaction but with a small effect size (Sanders et al., 2014).

2.3.5. Parenting stress. Parenting stress can be defined as an ‘adverse reaction to the psychological demands of being a parent’ (Deater-Deckard, 1998, p. 315). Parenting stress may be experienced as negative feelings towards the self and/or the child (Deater-Deckard, 1998). Deater-Deckard (1998) describe a model of parenting stress which had four components 1) an external causal event/agent (e.g. parenthood or child/ren); 2) parental appraisal of the causal event/agent including factors relating to responsibility and intentionality; 3) coping mechanisms; and 4) the stress response which may include physical and psychological impacts. The role of parenting stress is likely to be transactional with parenting stress impacting on child outcomes and child behaviour problems increasing parenting stress (Hutchison, Feder, Abar, & Winsler, 2016).

Research has found positive associations between parenting stress and authoritarian (Deater-Deckard & Scarr, 1996; Hutchison et al., 2016) and permissive parenting styles. Parenting stress has also been associated with insecure attachment

(Teti, Nakagawa, Das, & Wirth, 1991) and more problematic child behaviour (Crnic, Gaze, & Hoffman, 2005; Deater-Deckard & Scarr, 1996). Negative associations have also been found between parenting stress and PSE (Dunning & Giallo, 2012; Erdwins, Buffardi, Casper, & O' Brien, 2001; Wells-Parker, Miller, & Topping, 1990) and parental satisfaction (Dunning & Giallo, 2012). Intervention studies have shown that parenting stress can be ameliorated through cognitive behavioural programs which include a parent education component (Deater-Deckard, 1998).

2.4 Parenting and Mental Health

Parental psychosocial wellbeing has a significant impact on child development and wellbeing (Barlow, Smailagic, Huband, Roloff, & Bennett, 2014). It has been estimated that up to 23% of Australian children have a parent with a mental illness (Maybery, Reupert, Patrick, Goodyear, & Crase, 2009) with worldwide estimates ranging between 15 and 23% (Leijdesdorff, van Doesum, Popma, Klaassen, & van Amelsvoort, 2017). Furthermore, the frequency of parents within adult psychiatric services have been estimated from 12% to as high as 45% (Maybery & Reupert, 2018).

Parental mental illness has been associated with increased psychopathology for children. For example, children of parents diagnosed with severe mental illnesses such as schizophrenia, bipolar disorder and depression are at significantly greater risk of developing a range of psychiatric conditions by early adulthood, with approximately one third likely to develop a severe mental illness themselves (Rasic, Hajek, Alda, & Uher, 2014). Parental anxiety disorders have been associated with anxiety disorders in children (Beidel & Turner, 1997) and caregiver substance abuse

has been consistently associated with children having higher ratings and clinically significant outcomes on the Child-Behaviour Checklist (CBCL; Staton-Tindall, Sprang, Clark, Walker, & Craig, 2013).

Parental mental illness has also been associated with additional psychosocial risks for offspring such as failing to complete high school (Mowbray, Bybee, Oyserman, MacFarlane, & Bowersox, 2006; Mowbray & Mowbray, 2006), being placed into foster care (Oyserman, Benbenishty, & Ben-Rabi, 1992), and legal problems or incarceration (Mowbray et al., 2006; Mowbray & Mowbray, 2006). Finally, it should be noted that outcomes for children of parents with a mental illness are heterogenous with offspring reporting a wide range of functioning (Mowbray et al., 2006; Mowbray & Mowbray, 2006). For example, positive outcomes among children of parents with a mental illness have been associated with social support and family behaviours (i.e. better maternal decision-making during childhood) (Mowbray & Mowbray, 2006).

Non-specific illness factors have been found to have an impact on child outcome (Oyserman, Mowbray, Meares, & Firminger, 2000). For example, a recent study among parents diagnosed with psychosis found that the severity of illness and adaptive functioning (e.g. ability to manage household tasks, self-care, vocational capability) were reliably associated with the quality of care for children (Campbell et al., 2018). The timing of acute episodes of parental mental illness with the child's developmental stage has also been proposed as a possible risk factor with parental mental illness occurring when offspring are infants/early childhood considered particularly problematic, although there is a lack of research specifically testing this assumption (Oyserman et al., 2000). Environmental factors such as family conflict, marital stress and lack of social support have been associated with negative outcomes

for children of parents with a severe mental illness (Oyserman et al., 2000). Socio-economic status (SES) has also been found to be inversely related to the risk of child psychopathology among parents with anxiety and/or depressive disorders (Beidel & Turner, 1997).

When this program of research commenced in 2010, the majority of the literature in the field focused on the impact of parental mood and affective disorders. There was comparatively less focus on personality disorders, despite indications that personality psychopathology was likely to significantly impact on parenting behaviour and child development. Given that parental psychopathology is likely to impact on parenting in different ways (Breux, Harvey, & Lugo-Candelas, 2016) it is important to also explore the impact of specific diagnostic profiles/symptoms, such as BPD.

2.5 BPD and Parenting.

The following section summarises the literature examining outcomes for children of parents with a diagnosis of BPD and associated parenting challenges. First, the literature as it stood when the current research programme began in 2010 will be described, followed by evidence that has emerged in the past decade.

2.5.1. Literature prior to 2010. The first section will review the literature prior to 2010 to give a sense of the gaps that were present at the time this thesis commenced.

2.5.1.1. The impact of a parental diagnosis of BPD on children. Prior to 2010, several studies had investigated outcomes for infants and children of mothers with a diagnosis of BPD or borderline symptoms. For example, studies with infants (aged 2- to 12 months-old) of mothers with a diagnosis of BPD identified reduced eye contact and lowered infant affect (Crandell et al., 2003; Hobson et al., 2005), and disorganised attachment (Hobson et al., 2005). Furthermore, proband infants were less available for positive engagement with a stranger (Hobson et al., 2005), less attentive, interested and eager to interact with their mother (Newman et al., 2007) and vocalised less (Delavenne et al., 2008) compared to infants of healthy control mothers.

One study of young children aged 4-7 years examined themes that emerged from responses to a story stem completion measure (Macfie & Swan, 2009). Children of parents with a diagnosis of BPD were more likely to portray themes such as fear of abandonment, and more negative parent-child relationship expectancies compared to children of healthy controls (Macfie & Swan, 2009). Furthermore, the responses of children in the target group were more likely to reflect higher emotional dysregulation and a less stable self-image (Macfie & Swan, 2009). Another study with slightly older children (aged 6-14 years) found that children of parents with a comorbid diagnosis of MDD and BPD were significantly more likely to meet diagnostic criteria for depression compared to children of parents with MDD alone (Abela et al., 2005). Furthermore, this study demonstrated that a maternal diagnosis of BPD was associated with the child having cognitive/interpersonal vulnerability towards depression including factors such as negative attributional style, rumination, dysfunctional attitudes, self-criticism and excessive reassurance seeking (Abela et al., 2005).

Concerningly, children (aged over 4 years) of parents diagnosed with BPD (n=21) were more likely than children of parents with other personality disorders (n=23) to experience unstable home environments including exposure to parental drug and alcohol abuse and suicide attempts (Feldman et al., 1995). Furthermore, children in the index families experienced more changes in their schooling and were more likely to have been placed in living arrangements away from their mothers (Feldman et al., 1995). This same cohort of children also met criteria for a higher number of psychiatric disorders, particularly ADHD, childhood BPD and disruptive behaviour, and were assessed as having poorer general functioning compared to children in control families (Weiss et al., 1996). Children (aged 6 to 12) of parents with a diagnosis of BPD (n=6) more frequently scored in the dysfunctional range on the Paediatric Symptom Checklist compared to children of parents with other psychopathology (Jellinek et al., 1991).

Studies of adolescents of parents with a diagnosis of BPD have also demonstrated higher rates of psychopathology and interpersonal problems compared to children of parents with other mental health conditions and healthy controls. For example, one study of children aged 11-18 (n=23) demonstrated that children of parents high in BPD traits (i.e. met 4 or more criteria) scored higher on the temperamental characteristic of harm avoidance (e.g. more likely to experience anticipatory worry, fear of uncertainty, pessimism; shyness; and fatigue) compared to children of parents diagnosed with MDD and healthy controls (Barnow et al., 2006). Furthermore, children in the target group had higher scores on measures of behavioural (i.e. attention, aggression and delinquency) and emotional problems (i.e. anxiety/depression and physical complaints) compared to children of healthy parents (Barnow et al., 2006), and lower self-esteem compared to children of both healthy

parents and those with MDD or cluster C personality disorders (e.g. avoidant, dependant, or obsessive compulsive personality disorder; Barnow et al., 2006). Of great concern, children of mothers high in BPD traits reported greater suicidal tendencies compared to healthy controls (Barnow et al., 2006). Finally, another study found that higher maternal symptoms of BPD were independently related to adolescent self-reports that they had trouble making close friends and feeling socially accepted (Herr et al., 2008).

2.5.1.2. Parenting with a diagnosis of BPD/borderline symptoms. As evidence mounted that children of parents with a diagnosis of BPD/borderline symptoms were at greater risk of psychosocial problems, researchers began to explore parenting challenges among this target group. The following section summarises the literature according to some of the main themes identified prior to 2010.

2.5.1.2.1. Mother-child interactions. Several early studies identified potentially problematic mother-infant interaction dynamics. For example, mothers with BPD were more likely than healthy controls to relate to their two-month old (Crandell et al., 2003) and 12-month-old infants (Hobson et al., 2005) in an intrusively insensitive manner. Newman and colleagues (2007) also found that mothers with a diagnosis of BPD were less sensitive and structured in their interactions with their 3-36-month-old children compared to controls. Mothers diagnosed with BPD also exhibited a greater frequency of frightened/disoriented behaviour in response to their infant's attachment bids, when compared to the control groups in this study (Hobson et al., 2009). Furthermore, Hobson and colleagues (2009) found that a greater number of mothers diagnosed with BPD were rated as

having disrupted affective communication with their 12-18-month-olds compared to mothers diagnosed with depression or healthy controls. Mothers diagnosed with BPD have also demonstrated poorer quality of maternal vocalisation compared to healthy controls (Delavenne et al., 2008). In particular, these mothers were found to engage in longer pauses and express more non-vocal sounds (Delavenne et al., 2008).

Studies with children of mothers with BPD have also indicated problematic mother-child interactions. For example, a maternal diagnosis of BPD was found to be significantly associated with an insecure attachment style among children aged 6-14 years (Abela et al., 2005). In another study, higher maternal BPD symptoms were found to be independently related to adolescent fearful attachment cognitions once controlling for maternal symptoms of depression (Herr et al., 2008). A study with adolescents found that maternal BPD symptoms were independently related to interviewer ratings of chronic stress in the parent-youth relationship (Herr et al., 2008).

2.5.1.2.2. Unstable family environment. Early research indicated that family environments where a parent was diagnosed with BPD were more likely to be unstable. For example, mothers with BPD rated their families as less cohesive and organised compared to mothers with other diagnoses (Feldman et al., 1995). Mothers with a diagnosis of BPD were more likely to be unemployed compared to parents with other psychiatric disorders or no mental health condition (Barnow et al., 2006). Households where the mother had a diagnosis of BPD were less likely to have both parents living in the home concurrently (Barnow et al., 2006). Where both parents were present, children were exposed to greater chronic verbal abuse from fathers relative to comparison groups (Feldman et al., 1995).

2.5.1.2.3. *Boundary dissolution.* Several problems (e.g. enmeshment, intrusiveness, role-reversal, spousification, triangulation, autonomy support, and promotion/inhibition of autonomy) described in the literature may be reflective of the concept of boundary dissolution (see definition in Chapter 3, page 124). Children of parents with a diagnosis of BPD rated their parents poorly when it came to encouraging independence (Feldman et al., 1995). Furthermore, another study found that young children were more likely to demonstrate themes relating to role reversal in their coded narratives, compared to controls (Macfie & Swan, 2009). However, the findings were mixed as another study found no significant differences in observations of ‘role/boundary confusion’ among mothers with BPD and their infants compared to controls (Hobson et al., 2009).

2.5.1.2.4. *Parenting practices.* The parenting practices of parents with a diagnosis of BPD had been tentatively explored. For example, one study found that higher maternal symptoms of BPD were independently related to youth reports of parental hostility, even when controlling for maternal symptoms of depression (Herr et al., 2008). Adolescents of parents with a diagnosis of BPD were more likely to rate their parent as over-protective compared to children in comparison groups (Barnow et al., 2006).

2.5.1.2.5. *Parenting cognitions.* Early research also explored parenting cognitions among parents with a diagnosis of BPD. For example, mothers diagnosed with BPD were found to be less satisfied, felt less competent and were more distressed in their parenting role compared to controls (Newman et al., 2007).

Feldman and colleagues (1995) also noted that mothers with a diagnosis of BPD reported very low satisfaction with their families.

2.5.1.3. Summary of the literature prior to 2010. Initial research into the impact of parental symptoms of BPD on offspring indicated potential problems as early as infancy through to adolescence. Infants of mothers diagnosed with BPD demonstrated reduced eye contact (Crandell et al., 2003; Hobson et al., 2005), were less attentive and eager to engage with their mother (Newman et al., 2007), vocalised less (Delavenne et al., 2008), and were more likely to show signs of disorganised attachment than comparison groups (Hobson et al., 2005). Studies with older children demonstrated evidence of disrupted attachment (Abela et al., 2005; Herr et al., 2008; Macfie & Swan, 2009). Older offspring also demonstrated high levels of cognitive (Abela et al., 2005; Barnow et al., 2006; Macfie & Swan, 2009) and interpersonal vulnerabilities (Herr et al., 2008). Furthermore, children and adolescents of parents high in borderline traits evidenced high levels of psychopathology (Abela et al., 2005; Barnow et al., 2006; Jellinek et al., 1991; Weiss et al., 1996).

The literature also identified potential issues for parents with a diagnosis of BPD such as problematic maternal-child interactions (Crandell et al., 2003; Delavenne et al., 2008; Hobson et al., 2005; Hobson et al., 2009; Macfie & Swan, 2009; Newman et al., 2007), unstable family environments (Barnow et al., 2006; Feldman et al., 1995), parental overcontrol (Barnow et al., 2006; Feldman et al., 1995), maternal hostility (Herr et al., 2008), and maladaptive parenting cognitions (Feldman et al., 1995; Newman et al., 2007).

Prior to 2010 the literature into child and parenting among parents high in BPD symptoms was limited with only a small number of investigations, less than a

dozen independent samples, and generally small numbers of participants. While one study did investigate relationships between maternal BPD symptoms and adolescent psychosocial functioning in a large community sample (n=815; Herr et al., 2008) only a small percentage of respondents were likely to meet diagnostic criteria (9%) which limited the ability to generalise the findings to clinical samples.

Several studies included multiple children per family in the analysis and thus observations were not fully independent (Abela et al., 2005; Barnow et al., 2006; Feldman et al., 1995; Weiss et al., 1996). There are even fewer studies when considering research within each developmental period (infancy n= 3 independent samples; childhood n = 5 independent samples; Adolescence n = 2 independent samples studied). Overall, while indications of problems for offspring were emerging, there was still limited research to make general conclusions.

Prior to 2010, there were a lack of qualitative studies exploring the experience of parents with a diagnosis of BPD or protective factors. Furthermore, a limited number of fathers diagnosed with BPD were included in the literature. Studies were mostly cross-sectional and casual relationships between parental diagnosis and child outcomes had not been tested. Longitudinal research was warranted to explore the potential for the transgenerational transmission of BPD from parent to child. Finally, despite indications that parenting was challenging for those diagnosed with BPD, that there were risks to the mother-child relationship and problematic outcomes for children, there were no investigations into the efficacy of interventions for this specific population.

2.5.2. Literature from 2010 onwards. The following section describes the literature that has emerged in the field since 2010.

2.5.2.1. Impact of a parental diagnosis of BPD on children. There has been an expansion in research exploring the impact of parental borderline symptoms on offspring across developmental ages. For example, research has explored pregnancy outcomes for mothers diagnosed with BPD and found that newborns of mothers with this diagnosis had lowered Apgar scores and were more likely to be premature or referred to the special nursery for care compared to mothers without a diagnosis (Blankley, Galbally, Snellen, Power, & Lewis, 2015). Furthermore, research demonstrated that maternal borderline symptoms assessed at 32 weeks gestation accounted for the prospective relationship between maternal depressive trajectory (i.e. generated from mother's self-reported depression scores at 5, 9, 29 weeks and 14 months) and the child's externalising and total symptoms as measured by maternal ratings on the child behaviour checklist when the child was aged 2.5 years (Huntley, Wright, Pickles, Sharp, & Hill, 2017).

Research comparing groups have reported that infants of mothers high in borderline symptoms smiled less (White, Flanagan, Martin, & Silvermann, 2011), vocalised less (Apter et al., 2016; White et al., 2011), demonstrated greater fear (White et al., 2011), were less soothable (White et al., 2011) and demonstrated less nonautonomic self-regulation behaviour (Apter et al., 2016) than comparisons. One study found that in response to a stressor (i.e. still-face paradigm), infants of mothers with BPD were more likely to avert their gaze and engaged in more self-regulatory behaviours than infants of controls (Apter et al., 2016). The authors suggested that

this was evidence of infants making their own attempts to self-regulate as they were failing to find comfort and security within their mother (Apter et al., 2016).

In line with previous research, a higher proportion of infants of mothers high in BPD symptoms (48%) were classified as having insecure attachment compared to infants of mothers low in borderline symptoms (28%; Gratz et al., 2014). A subsequent analysis combining two cohorts of data previously reported in the literature (Hobson et al., 2005; Lyons-Ruth, Connell, Grunebaum, & Botein, 1990) found that infants of mothers diagnosed with BPD were more likely to be disinhibited in their behaviour towards a stranger compared to infants of mothers diagnosed with depression or healthy controls (Lyons-Ruth, Riley, Patrick, & Hobson, 2019).

Correlational research among community samples has found that maternal borderline symptoms were positively related to maternal reports of infant anger (Whalen, Kiel, Tull, Latzman, & Gratz, 2015). Another study failed to find significant relationships between maternal borderline symptoms and infant responsiveness and involvement during filmed interactions within the family home assessed one year later (Høivik, Lydersen, Ranøyen, & Berg-Nielsen, 2018). A longitudinal study found that maternal borderline symptoms assessed in pregnancy were significantly positively related to infant negative emotionality as well as maternal reports of child internalising, externalising and total problems rated at 2.5 years among families presenting with psychosocial risks (Huntley et al., 2017). Prospective research suggested that parental borderline symptoms assessed during pregnancy did not predict child expressive or receptive language at age two years (Haabrekke et al., 2015).

In the past decade, a few studies have emerged exploring the impact of maternal borderline symptoms/BPD diagnosis on pre-schoolers. The findings of one

study suggested that children (aged 31-69 months) of mothers diagnosed with BPD performed worse on tasks assessing theory of mind and capacity to describe and identify the causes of emotion compared to children in a control group (Schacht, Hammond, Marks, Wood, & Conroy, 2013). In another study, maternal borderline symptoms were negatively associated with executive functioning and affective perspective-taking among their pre-schoolers (Zalewski, Musser, Binion, Lewis, & O'Brien, 2019). In contrast to Schacht and colleagues (2013) this study failed to find a significant relationship between maternal borderline symptoms and offspring's composite theory of mind scores.

Several studies have also explored borderline symptoms as a predictor of pre-schoolers' behaviours. For example, a Norwegian study found that borderline symptoms among parents from a large community sample predicted child internalising and externalising symptoms among pre-schoolers (Berg-Nielsen & Wichström, 2012). A prospective study in the USA found that maternal and paternal borderline symptoms, assessed when their child was aged three, were associated with maternal-reports of child externalising and internalising symptoms at age six (Breux, Harvey, & Lugo-Candelas, 2014). Furthermore, maternal borderline symptoms were prospectively associated with maternal reports of child social skills at age six (Breux et al., 2014). However, these results did not remain unique predictors of child outcomes when controlling for other forms of parental psychopathology.

In the past decade, one additional study has explored between group differences when comparing school-aged children of parents with a diagnosis of BPD to controls. This study investigated temperamental characteristics of children of mothers diagnosed with BPD and found that these children rated higher on measures of negative affectivity (anger/frustration and fear) and lower in effortful control (i.e.

difficulty suppressing inappropriate behaviour when told to do so and more difficulty focussing on tasks) compared to normative controls (Mena, Macfie, & Strimpfel, 2016).

Two studies have explored relationships between parental borderline symptoms and child outcomes in school-aged children. For example, researchers found a positive significant relationship between parental borderline symptoms and offspring's externalising symptoms among a smaller sample of children and adolescents with mental health problems (Bertino, Connell, & Lewis, 2012). However, no significant relationship was found between parental borderline symptoms and child internalising symptoms (Bertino et al., 2012). The second study demonstrated that increased maternal borderline symptoms measured in a community sample were associated with higher levels of externalising, internalising and total symptoms on the Child Behaviour Checklist (CBCL; parent report) as measured one year later (Kaufman et al., 2016).

Several more studies have also emerged exploring relationships between parental borderline symptoms and outcomes among offspring in adolescence. For example, a study found a positive association between parental borderline symptoms and borderline symptoms in their adolescent offspring (Cheng, Huang, Liu, & Liu, 2010). In another study, maternal borderline symptoms were found to mediate the relationships between lack of promotion of autonomy (i.e. independence) and relatedness (i.e. close relationships) and adolescent internalising and externalising symptoms (Frankel-Waldheter, Macfie, Strimpfel, & Watkins, 2015). Finally, a large community study found that that maternal borderline symptoms were significantly associated with low self-control and negative affectivity among adolescent offspring (Zalewski et al., 2014).

Longitudinal studies have found evidence for maternal BPD/borderline symptoms predicting offspring borderline symptoms in late adolescence and early adulthood (Barnow et al., 2013; Conway et al., 2015; Stepp et al., 2013). Maternal borderline symptoms were also positively associated with self-reported general psychopathology in offspring five years later (Barnow et al., 2013). These studies support theories regarding the potential for intergenerational transmission of BPD from parent to child. However, interpretations should be made with caution given that only a small proportion of participants in these studies would have actually met diagnostic criteria for BPD. Furthermore, in some cases maternal BPD was not a unique predictor of offspring BPD when controlling for particular factors in multivariate models (Conway et al., 2015; Stepp et al., 2013) suggesting that multiple maternal characteristics may predict the development of BPD among offspring.

2.5.2.2. Parenting challenges. Research from the past decade has expanded understandings of the mother-child relationship, unstable family environments, parenting practices and parenting cognitions within this population. More recent research has also explored behaviour in pregnancy, emotion recognition, mentalisation/mind-mindedness and emotional socialisation processes. The findings of these studies are summarised below.

2.5.2.2.1. Behaviour during pregnancy. Blankley (2015) retrospectively analysed case notes of 42 mothers who met diagnostic criteria for BPD and reported that 38% had poor engagement with antenatal services, 31% found their pregnancy ‘traumatic’ and 31% requested an early delivery. Another study found that women

diagnosed with BPD with or without co-occurring MDD were more likely than healthy controls to report drinking alcohol during pregnancy (White et al., 2011).

2.5.2.2.2. Mother-child interactions. Mothers of infants with a diagnosis of BPD (with or without MDD) have been found to be less likely to touch, smile and engage in game-playing (White et al., 2011) and were less socially engaged (Apter et al., 2016) compared to mothers with MDD or healthy controls. Furthermore, maternal imitation was significantly impaired among participants with BPD alone compared to mothers with BPD + MDD, MDD and healthy controls (White et al., 2011). Mothers high in BPD symptoms showed less positive affect in response to infant distress compared to those low in BPD traits (Apter et al., 2016; Kiel, Gratz, Moore, Latzman, & Tull, 2011). Mothers diagnosed with BPD rated their interactions with their infants as more difficult compared to healthy controls (Elliot et al., 2014). They were also more likely touch their infant intrusively after a mild stressor (Apter et al., 2016). In contrast, Kiel et al. (2011) did not find a significant difference in insensitive parenting between a sample of community mothers high in borderline symptoms compared to those low in these symptoms. However, they did find that mothers high in borderline symptoms were more likely to respond insensitively to their infants' distress the longer in duration it occurred.

Investigations with school-aged children converge with those in infancy and suggest less sensitive mother-child interactions with mothers diagnosed with BPD more likely to respond to their child with fearful/disoriented behaviour compared to healthy controls (Macfie, Kurdziel, Mahan, & Kors, 2017). An investigation among a community sample of mothers and fathers, found that borderline symptoms were associated with lower quality responsiveness to their child suggesting problematic

parenting behaviours even when symptoms were very mild (Wilson & Durbin, 2012). In contrast, Kluczniok and colleagues (2018) did not find maternal borderline symptoms to be a significant predictor of sensitivity in maternal-child interactions among a community sample. They attributed this to controlling for co-morbid MDD which was associated with sensitivity in their study. Research has also found that mothers diagnosed with BPD were less likely to promote close relationships with their adolescents as evidenced by deficits in validating, engaging or agreeing with their teenager's opinions (Frankel-Waldheter et al., 2015).

2.5.2.2.3. *Boundary dissolution.* Autonomy support refers to the degree in which the parent behaves in a way that acknowledges and respects the validity of the child's motives, perspectives and individuality (Macfie et al., 2017). Mothers with a diagnosis of BPD who were observed with their school-aged children were rated as being lower in autonomy support and more likely to engage in role reversal compared to comparative norms (Macfie et al., 2017). Mothers with a diagnosis of BPD were more likely than control comparisons to inhibit their adolescent's autonomy by over-personalising disagreements and pressuring them to agree with their point of view without rationale (Frankel-Waldheter et al., 2015). Furthermore, another large community study found that maternal borderline symptoms were negatively associated with acceptance of individuation among their teenage daughters (Zalewski et al., 2014).

Psychological control is considered a form of intrusiveness, which is also considered under the definition of boundary dissolution. Maternal borderline symptoms were found to uniquely predict the use of psychological control (defined as controlling through guilt) among community-based mothers parenting teenage

daughters (Zalewski et al., 2014). A more recent study explored psychological control (defined as constraints on verbal expression, invalidating feelings, personal attacks/blaming, guilt induction, love withdrawal and erratic emotional behaviour) among mothers with a diagnosis of BPD and found that these mothers were more likely to utilise psychologically controlling tactics compared to healthy controls, when interacting with their adolescents (Mahan, Kors, Simmons, & Macfie, 2018).

2.5.2.2.4. Emotion recognition. Mothers diagnosed with BPD performed worse on infant recognition tasks compared to healthy controls (Elliot et al., 2014). In particular, they were more likely to misattribute neutral infant expressions as sad (Elliot et al., 2014). Another study found evidence suggesting that mothers high in borderline symptoms had heightened sensitivity to their infant's anger (Whalen et al., 2015).

2.5.2.2.5. Mentalisation and mind-mindedness. As mentioned in chapter 1 mentalisation has been hypothesised as a core deficit associated with BPD (Fonagy & Bateman, 2008; Fonagy & Luyten, 2009) and has the potential to impact on parent-child relations. One index of mentalising capacity is mind-mindedness which refers to 'the proclivity to treat one's infant as an individual with a mind, capable of intentional behaviours' (Meins et al., 2002, p. 1715). Mind-mindedness is operationalised by coding the frequency that a parent comments on what their child may be thinking or feeling in an appropriate or non-attuned manner (Meins et al., 2002).

A study of mothers with a diagnosis of BPD and their children aged 31-69 months found mothers in the index group were significantly less likely to make mind-related comments when describing their children compared to a control group

(Schacht et al., 2013). A more recent study found that mothers with a diagnosis of BPD were no different in the number of references they made to their 12-month old's mental state and were similar in the number of appropriate and positive references made when compared to healthy controls. However, mothers with a diagnosis of BPD were 3.6 times more likely to make misattuned mind-related comments (Marcoux, Bernier, Séguin, Boike Armerding, & Lyons-Ruth, 2017). Finally, another study found that mothers diagnosed with BPD were just as likely as healthy controls to report 'balanced' representations of their child (Crittenden & Newman, 2010).

2.5.2.2.6. Emotional socialisation processes. Mothers rated high in borderline symptoms were found to respond to their infant's emotional expressions with punitive/minimisation emotional socialisation strategies when compared to mothers low in borderline symptoms (Kiel, Viana, Tull, & Gratz, 2017). Maternal emotional regulation was found to mediate this relationship. Further, only maternal-reported infant anger was related to greater punitive/minimising emotional socialisation behaviour among mothers high in BPD symptoms. The authors suggested that this misattribution or bias towards perceiving anger in infants may result in non-supportive interactions.

Research has also found that both maternal (n= 109) and paternal (n= 109) borderline symptoms were significantly positively related to the use of non-supportive strategies (e.g. distress, punitive, and minimising/discouraging) in response to negative child affect as coded from audio recordings between parents and their three-year old children who had behavioural problems (Breux et al. 2016). However, it should be noted that this sample of parents were drawn from the community and only

a small proportion of mothers (8.2%) and fathers (7.6%) indicated clinically significant levels of symptomology on the self-report questionnaire.

2.5.2.2.7. Parenting practices. Higher maternal borderline symptoms/BPD diagnosis have been associated with lower levels of warmth (Harvey, Stoessel, & Herbert, 2011) and increased over-protection (Elliot et al., 2014; Reinelt et al., 2014). Maternal borderline symptoms have also been associated with greater negative affect, over reactivity and hostility (Elliot et al., 2014; Frankel-Waldheter et al., 2015; Harvey et al., 2011; Høivik et al., 2018; Kluczniok et al., 2018; Macfie et al., 2017) in parent-child observations. At the extreme end, BPD/elevated borderline symptoms have been associated with child abuse potential (Dittrich et al., 2018; Herron & Holtzworth-Munroe, 2002; Hiraoka et al., 2016) and child protection involvement (Blankley et al., 2015; Laulik, Allam, & Browne, 2016; Pereplechikova, Ansell, & Axelrod, 2012).

Maternal borderline symptoms have also been found to independently predict self-reported laxness when controlling for other forms of psychopathology (Harvey et al., 2011). Reinelt (2014) found that maternal borderline symptoms were positively associated with adolescent perceptions of maternal rejection. Several theorists have suggested that an oscillation between over-and-under involvement may be characteristic of parenting with a diagnosis of BPD (Eyden, Winsper, Wolke, Broome, & MacCallum, 2016; Reinelt et al., 2014; Stepp, Whalen, Pilkonis, Hipwell, & Levine, 2012b).

2.5.2.2.8. Parenting cognitions. Consistent with research prior to 2010, mothers with a diagnosis BPD reported poorer parenting self-efficacy compared to

healthy controls (Elliot et al., 2014). They also reported greater parenting stress compared to healthy comparisons (Crittenden & Newman, 2010; Elliot et al., 2014) and a non-clinical reference group (Renneberg & Rosenbach, 2016). Furthermore, results on the Parenting Stress Index suggested that mothers diagnosed with BPD felt stress relating to both child (e.g. distractibility /hyperactivity; adaptability and demandingness) and parent (e.g. competence, role restriction, depression, attachment, and health) factors when compared to non-clinical norms (Ramsauer, Mühlhan, Mueller, & Schulte-Markwort, 2016).

2.5.2.2.9. Unstable family environment. Infants of mothers diagnosed with BPD and/or co-morbid MDD were rated as having greater environmental risk compared to infants of mothers with MDD alone or healthy controls (White et al., 2011). For example, mothers with a diagnosis of BPD were found to have significantly lower household income compared to mothers with other personality disorders and/or anxiety and depression (Ramsauer et al., 2016). Mothers with a diagnosis of BPD also reported significantly more isolation and experienced more conflict/less support from their partners compared to mothers with other personality disorder diagnoses (Ramsauer et al., 2016).

2.5.2.3. Parenting as a mediator between parental borderline symptoms and offspring outcomes. Several studies have emerged testing whether parenting mediates the relationship between maternal borderline symptoms and offspring outcomes. A recent cross-sectional study found that maternal frightened/disoriented interactions mediated the relationship between maternal borderline symptoms and infant disinhibited behaviour (Lyons-Ruth et al., 2019). Another cross-sectional study with

an older cohort of children (aged 5 to 12) indicated that maternal hostility mediated the relationship between maternal borderline symptoms and several child outcomes such as number of psychiatric diagnoses and maternal ratings of child internalising and externalising symptoms (Kluczniok et al., 2018).

Prospective research is limited but two studies have explored potential pathways between maternal symptoms of BPD and maladaptive outcomes for offspring. For example, the first study explored whether maternal intrusiveness observed at 12 months would mediate the relationship between maternal borderline symptoms and child language at 2 years (Haabrekke et al., 2015). The model was not significant however it was difficult to draw firm conclusions as the sample size was small and borderline symptoms were not the main focus of the research.

Another prospective community-based family cohort study based on a much larger sample, suggested that the transmission of borderline symptoms from mother to adolescent was mediated by a latent factor, maladaptive mother-child interactions (Reinelt et al., 2014). The latent construct of maladaptive child-parent interactions was characterised by insensitive parenting in which children rated their mothers as both rejecting and over-protective (Reinelt et al., 2014). It was also comprised of mother-adolescent discrepancies in reports of offspring internalising symptoms. These findings suggested that the potential for transgenerational transmission of emotional dysregulation may occur in part due to parenting characteristics. Hence this may be a reasonable target for early intervention.

2.5.2.4. Interventions for parents with a diagnosis of BPD and their children. As highlighted above, the literature suggests that children of parents with a diagnosis of BPD/borderline symptoms are vulnerable to psychological and

psychosocial risks. These parents may be challenged in various ways in their parenting role. In particular, insensitive parenting has been identified as a potential factor in the transgenerational transmission of psychological problems from parent to child (Reinelt et al., 2014). In general, parenting interventions have proven to strengthen parenting behaviours (e.g. increased positive interactions, effective discipline, open communication, problem-solving and monitoring etc.) in the long term (Sandler, Ingram, Wolchik, Tein, & Winslow, 2015). Furthermore, parenting interventions have been found to directly reduce internalising and externalising problems in offspring over time (Sandler et al., 2015). Encouragingly, interventions targeting parents with a mental illness have been found to reduce the risk of children developing a mental illness by approximately 40% (Siegenthaler, Munder, & Egger, 2012).

When the current research program commenced there were limited published accounts of interventions specific to parents with a diagnosis of BPD or their children. Several relevant interventions have since been reported which include a psychoeducational emphasis to parenting with a personality disorder (McCarthy, Lewis, Bourke, & Grenyer, 2016), a supportive group program for young mothers with a diagnosis of BPD and attachment disorder (Compés et al., 2016), an attachment-based psychotherapy called ‘Watch, Wait and Wonder’ for mothers diagnosed with BPD (Newman & Stevenson, 2008), mentalisation-based treatment (MBT-P) for parents diagnosed with BPD and their infants (newborn to 4 years old; Nijssens, Luyten, & Bales, 2013) and a 12 week CBT and DBT informed parenting program for mothers diagnosed with BPD and their young children (newborn to 6 years old; Renneberg & Rosenbach, 2016). However, these approaches have yet to publish data regarding the effectiveness of the interventions on participant outcomes.

Only very recently has one study provided data outlining improvement in functioning for 20 mother-infant dyads who participated in a 24-week mother-infant DBT program which adapted manualised DBT group skills training to focus on the mother-infant relationship (MI-DBT; Sved Williams, Yelland, Hollamby, Wigley, & Aylward, 2018). The evaluation demonstrated statistically significant improvements in maternal post-natal depressive, anxiety and borderline symptoms, as well as improvements in areas of pre-mentalizing (Sved Williams et al., 2018). Significant improvements were also noted in the dyadic relationship (Sved Williams et al., 2018). While this evaluation of a ‘real-life’ program occurring in clinical practice is encouraging, the results require replication utilising an independent research team, blinded raters of outcomes, assessment of infant outcomes, and a randomisation to treatment conditions vs control. In general, it is evident from the extant literature that much work still needs to occur in developing and trialling targeted interventions for parents with a diagnosis of BPD (Fossati & Somma, 2018).

2.5.2.5. Summary of the literature from 2010 onwards. Research over the past ten years has expanded knowledge in the field and continued to show that offspring of parents with a diagnosis of BPD/borderline symptoms experience more adverse outcomes compared to controls. For example, a study in the perinatal period suggested that newborns of mothers with a diagnosis of BPD were more likely to experience negative birth outcomes (Blankley et al., 2015). Studies in the infant period provide further evidence problems in attachment and self-regulation behaviour (Apter et al., 2016; Lyons-Ruth et al., 2019; White et al., 2011). Emerging research with pre-school children of mothers diagnosed with BPD had poorer levels of mental state understanding (Schacht et al., 2013). School-aged children of mothers diagnosed

with BPD scored higher on measures of negative affectivity and had lower effortful control than comparisons (Mena et al., 2016).

Interestingly, despite nearly a decade passing, it was estimated that only a small number of new unique samples of parents with a diagnosis of BPD emerged in the literature (perinatal period = 1, infancy = 6, pre-school = 1, school-aged = 1, adolescence/early adulthood = 1). A number of papers reported on data from the same sample, perhaps indicating some of the challenges that occur in recruiting research participants in this area.

The past decade has seen a growth in studies exploring the relationships between parental borderline symptoms and outcomes in offspring, predominantly among community samples. In particular, maternal borderline symptoms were found to be positively associated with internalising symptoms (Huntley et al., 2017; Kaufman et al., 2016), externalising symptoms (Bertino et al., 2012; Huntley et al., 2017; Kaufman et al., 2016), and total problems (Huntley et al., 2017; Kaufman et al., 2016) across developmental stages. Maternal borderline symptoms were also negatively associated with executive functioning (Zalewski et al., 2019) and affective perspective taking (Zalewski et al., 2019) among pre-schoolers, negative emotionality among adolescents (Zalewski et al., 2014) and positively associated with low self-control (Zalewski et al., 2014) among adolescents. Furthermore, longitudinal studies have found evidence of maternal BPD/borderline symptoms predicting offspring borderline symptoms in late adolescence and early adulthood (Barnow et al., 2013; Conway et al., 2015; Stepp et al., 2013) providing some evidence for the intergenerational transmission of borderline symptoms.

Over the past decade investigations of parenting among parents with a diagnosis of BPD/borderline symptoms have provided further evidence for

problematic mother-child interactions (Apter et al., 2016; Elliot et al., 2014; Frankel-Waldheter et al., 2015; Kiel et al., 2011; Macfie et al., 2017; Macfie et al., 2014; White et al., 2011; Wilson & Durbin, 2012), under – and over-involved parenting practices (Elliot et al., 2014; Harvey et al., 2011; Reinelt et al., 2014), problematic parenting cognitions (Crittenden & Newman, 2010; Elliot et al., 2014; Ramsauer et al., 2016), boundary dissolution (Frankel-Waldheter et al., 2015; Mahan et al., 2018; Zalewski et al., 2014), and unstable environments (Ramsauer et al., 2016; White et al., 2011).

New areas of research have also suggested that parents with a diagnosis of BPD/borderline traits may have difficult pregnancies (Blankley et al., 2015) and problems with emotion recognition (Elliot et al., 2014; Whalen et al., 2015), mentalisation (Marcoux et al., 2017; Schacht et al., 2013), and emotional socialisation of their children (Breaux et al., 2016; Kiel et al., 2017). There is emerging research suggesting that parenting may mediate the impact of parental borderline symptoms on offspring (Kluczniok et al., 2018; Lyons-Ruth et al., 2019; Reinelt et al., 2014) though there is still not enough evidence to draw firm conclusions and further research is required in this area.

In response to calls for action to develop interventions specific for parents with a diagnosis of BPD and their offspring (Stepp, Whalen, et al., 2012a) several programs have been described in the literature but only one pilot program has reported pre-post outcome data for mothers diagnosed with BPD and their infants (Sved Williams et al., 2018). To date, there have been no randomised control trials exploring the effectiveness of parenting programs specific to families with a diagnosis of BPD highlighting a significant gap in the literature.

2.6 Thesis aims

The lack of parenting programs specific to parents with a diagnosis of BPD remains a gap in clinical practice. When this research program commenced there were no published accounts of parenting programs targeting parents with a diagnosis of BPD. Although there has been some response to calls for the development of specific intervention programs since this time, few have been rigorously evaluated. There is still no clear consensus on what elements an intervention program should target. The aim of the current thesis was to increase the understanding of the impact of a diagnosis of BPD on parenting and child outcomes with the aim of informing the development of targeted interventions.

At the commencement of this research program, it was apparent that the majority of the research in the field was quantitative in nature and that qualitative accounts of parenting with a diagnosis of BPD were rare. A mixed methods approach utilises both qualitative and quantitative research methods to enable a breadth and depth of understanding and corroboration (Schoonenboom & Johnson, 2017). The integration of qualitative views with quantitative data can be a sound approach to informing intervention planning (Ivankova & Wingo, 2018). The current thesis utilised a mixed methods approach in which the first three studies were qualitative, and the final study had a quantitative research design. A sequential design was employed in that the findings from the qualitative research studies informed the testing of hypothesised relationships in the final study.

Mixed methods research also allows for the exploration of different viewpoints on the same issue and provides contextual understandings shaped by real-world experiences (Ivankova & Wingo, 2018). The current research project explored

both clinician and consumer viewpoints on parenting with a diagnosis of BPD and the availability of support/interventions. Kazdin (2008) noted that clinician experience can inform the scientific knowledge base if it is codified and used to generate and test hypotheses. Exploring clinicians' perspectives and experiences in the first study aimed to achieve this goal. However, this approach also has the potential for bias.

The second study utilised a qualitative research design to explore the perspectives and experiences of parents with a diagnosis of BPD. We aimed to recruit a sample of current and past mental health service-users (who were parents with a diagnosis of BPD) to seek their opinions on accessibility and helpfulness of existing parenting resources and to recommend skills or resources which may be of assistance. This approach aimed to draw on the valuable knowledge service-users have regarding their experiences of mental health programmes and to ensure that the conclusions drawn from clinician reports were valid and relevant. The qualitative design of the interview supported the potential emergence of new insights from parents' narratives and was deemed less constrained than a quantitative research design in which the researcher's hypotheses would pre-determine the variables under investigation.

The final study in the thesis was quantitative and aimed to test the relationships between parental borderline symptom severity, parenting and offspring outcomes. This study focused on outcomes of offspring in the middle-childhood and adolescent developmental stages given that there is less research in this area. A number of studies in the extant literature have utilised community samples in which only a small proportion of respondents were likely to meet diagnostic criteria. As such the final paper aimed to recruit parents high in borderline symptoms. Finally, the thesis concludes with discussion of how this body of work can inform clinical practice and future directions for research.

Chapter 3: Paper One

3.1 Preamble

The first project undertaken for this thesis explored the perspectives of clinicians experienced in working with parents with a diagnosis of BPD or their families. Clinician opinions present a valuable source of knowledge given that clinicians observe patterns of behaviours across a multitude of families over time. Furthermore, clinicians are likely to possess a great deal of knowledge about the availability and effectiveness of therapeutic services in their local communities. The combination of clinical experience and theoretical knowledge observed by training in the field, valuably contributes to the proposal of recommendations for improving services.

Clinicians were asked to complete an online survey which asked questions about the potential impact of BPD symptoms on parenting and offspring. Clinicians were also asked to provide the opinions on the effectiveness of current treatments and recommendations for the development of interventions. A large set of data was acquired and therefore the results were reported in two manuscripts.

The current chapter presents the first paper which summarised the findings relating to the impact of parental symptoms of BPD on parenting and implications for treatment. A qualitative analysis of responses was undertaken given that at the time, there were a limited number of studies investigating this topic, and those that had were quantitative in nature and driven by variables pre-determined by the researchers. The qualitative approach of the current study enabled the potential for new insights to emerge from clinician reports, allowing an in-depth understanding of the topic.

This paper addressed the thesis aim to increase understanding of the potential impact of BPD symptoms on parenting. Several themes emerged from a large pool of clinician reports, describing a number of ways in which a parental diagnosis of BPD may impact on parenting. Furthermore, in the context of a limited number of published accounts regarding the effectiveness of interventions for parents with a diagnosis of BPD and their families, the current paper was able to identify some of the approaches that are occurring in clinical practice, and to gain insight into program elements that may inform the development of targeted interventions in future.

It should be noted that the structure of the manuscript presented below has been altered to be consistent with the dissertation formatting. The formatting of citations may differ slightly from the published version if the citation has been previously reported in the thesis. In some cases, a citation's date of a publication may have changed due to the journal article going from early online view to publication. In this case, the latter date is reported to maintain consistency with the current literature, and thus it may differ from the published article. Finally, the numbering of tables has been altered for the purposes of the dissertation.

Borderline personality disorder and parenting: Clinician perspectives.

- PUBLISHED PAPER -

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University of Adelaide

3.2 Statement of Authorship

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Name of Principal Author (Candidate)	Dianna R. Bartsch		
Contribution to the Paper	Responsible for the development, data collection, data analysis and writing of the paper in collaboration with my supervisors. Served as the corresponding author and was responsible for the submission, revisions and responses to journal reviewers.		
Overall percentage (%)	80%		
Certification:	This paper reports on original research I conducted during the period of my Higher Degree by Research candidature and is not subject to any obligations or contractual agreements with a third party that would constrain its inclusion in this thesis. I am the primary author of this paper.		
Signature		Date	10/11/19

Co-Author Contributions

By signing the Statement of Authorship, each author certifies that:

- i. the candidate's stated contribution to the publication is accurate (as detailed above);
- ii. permission is granted for the candidate to include the publication in the thesis; and
- iii. the sum of all co-author contributions is equal to 100% less the candidate's stated contribution.

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3.3 Abstract

Borderline personality disorder (BPD) is a pervasive and debilitating mental health condition. Current literature suggests that children of families where a parent has a diagnosis of BPD may be particularly vulnerable to experiencing psychological and psychosocial difficulties. However, there is a limited understanding of the mechanisms by which difficulties may be transmitted from parent to child. Furthermore, fear of stigma and intervention from child protection services may be barriers to these parents engaging in research about their parenting experiences. An alternative source of information can be sourced from clinicians who work with these families in clinical contexts.

This study aimed to explore mental health clinicians' perceptions of parenting problems that may be experienced by individuals with a diagnosis of BPD and clinicians' views on available parenting resources, supports or interventions for this cohort of families. Mental health clinicians were asked to provide their opinions via a voluntary and anonymous online survey. A total of 106 clinicians, trained in various disciplines and working in varied clinical contexts, participated from across four countries (Australia, USA, Canada and New Zealand).

Thematic analysis revealed six themes relating to parenting problems within this population. These included disruption to empathic responsiveness, difficulties maintaining stable and/or safe environments, difficulty managing interpersonal boundaries, parenting skill deficits and poor parenting self-efficacy. An additional theme, capacity for adaptive parenting, was also identified. Finally, themes relating to effective and ineffective parenting resources, supports and interventions were

discussed and recommendations were made for the development of future parenting interventions.

3.4 Introduction

Borderline personality disorder (BPD) is a pervasive condition which is characterised by emotional dysregulation, impulsive and self-destructive behaviours, chaotic interpersonal relationships, cognitive difficulties, and an unstable sense of self (American Psychiatric Association, 2013). A number of studies have explored the impact of a parental diagnosis of BPD on children (Abela et al., 2005; Barnow et al., 2006; Feldman et al., 1995; Herr et al., 2008; Macfie & Swan, 2009; Weiss et al., 1996). However, there have been limited studies that specifically explore parenting behaviours within this population. This paper aims to extend the current literature by surveying clinicians who work with parents with a diagnosis of BPD or their children, to identify their views on potential parenting challenges experienced within this population and the effectiveness of currently available parenting resources, supports and interventions for this cohort of parents and children.

To date, the research indicates that a maternal diagnosis of BPD is associated with dysfunctional mother-infant interactions (Crandell et al., 2003; Hobson et al., 2005; Hobson et al., 2009; Newman et al., 2007; White et al., 2011). In particular, Newman et al. (2007) compared infant interaction patterns between mothers with a diagnosis of BPD and community controls. The authors found that mothers with a diagnosis of BPD were less sensitive towards their infants and less structured in their interactions when compared to the control group. They also noted that the infants of these mothers were less attentive, less interested and eager to engage with their parent. These findings suggest that maladaptive interactions are evident early on in the parent-infant relationship and the authors hypothesised that this may pave the way for problems at later stages of the child's development.

This hypothesis is supported by a handful of studies that have been conducted with children of parents with a diagnosis of BPD at different stages of childhood. For example, a parental diagnosis of BPD has also been found to impact on representations of the child-caregiver relationship and of the self, in the narratives of pre-school aged children (Macfie & Swan, 2009). These authors reported that children of parents diagnosed with BPD told stories that demonstrate more role reversal and fear of abandonment, greater incongruent or shameful representations of the self, and more emotional dysregulation when compared to a normative control group. The authors hypothesised that the young children who demonstrated these risk factors would have a greater likelihood of experiencing unstable relationships, self-injurious behaviour, and difficulties regulating emotions in early adulthood.

Studies of the impact of a parental diagnosis of BPD during middle childhood have also demonstrated that children in this age range are at higher risk of adversity. For example, children of mothers with BPD were more likely to be exposed to disruptive and unstable households, parental drug or alcohol abuse and maternal suicide attempts compared to children of parents with other personality disorder diagnoses (Feldman et al., 1995). In a similar study, children of parents with a diagnosis of BPD were also at greater risk of developing psychopathology and having poorer general functioning when compared to children of parents with other personality disorder diagnoses (Weiss et al., 1996). Abela et al. (2005) demonstrated that children of parents with a comorbid diagnosis of major depressive disorder (MDD) and BPD were 6.8 times more likely to have experienced an episode of depression compared to children of parents with a diagnosis of MDD alone. Furthermore, children of parents with BPD remained more vulnerable to depression even after controlling for the parent's depressive symptoms.

Adolescents of parents with a diagnosis of BPD have also been found to be at risk of emotional, behavioural, psychosocial and somatic problems. For example, Barnow et al. (2006) found that German adolescents (11 -18 years) who had a mother diagnosed with BPD were more likely to report a temperament characterised by excessive worry, fear of uncertainty, shyness, and fatigue. They were also found to experience greater levels of general psychopathology when compared to adolescents of mothers diagnosed with depressive disorders, cluster C personality disorders and those without a psychiatric diagnosis. It was most concerning that 26% of children of mothers with BPD reported past suicidal ideation and/or plans, compared to less than 9% in comparison groups.

Finally, Herr et al. (2008) explored the association between maternal symptoms of BPD and adolescent psychosocial functioning in a large Australian community sample. The authors found that maternal BPD symptoms were related to youth reporting interpersonal problems such as fearful attachment (i.e. they would like to have emotionally close relationships but find it difficult to trust others), a poor perceived ability to make close friends, or difficulties with social acceptance. Once again, these problems were independent of the effect of maternal depression, suggesting that maternal BPD represents separate risk factors.

In sum, these findings suggest that a diagnosis of BPD may present significant challenges for this cohort of parents and their children. Furthermore, these challenges seem to be additional to those experienced by parents with some other forms of mental illness, highlighting the importance of exploring what is happening for this particular subset of families. At present, there are limited investigations exploring the pathways through which a parental diagnosis of BPD impacts on children's psychosocial functioning. Reinelt et al. (2014) recently examined data from a large

population-based study and found evidence suggesting that the transmission of BPD symptoms from mother to child may be mediated by interactions characterised by insensitive parenting (i.e. fluctuations between over-protective and rejecting styles) as well as discrepancies between mother and child reports of internalising symptoms. Zalewski et al. (2014) also demonstrated that maternal BPD symptoms of affective and behavioural dysregulation were uniquely related to parenting variables such as harsh punishment and controlling through guilt. These studies both highlight the potential impact of a diagnosis of parental BPD on children, through parenting behaviours. However, the data from these investigations were collected from non-clinical samples and therefore it is unknown whether the findings generalise to parents with a diagnosis of BPD.

The use of community samples rather than clinical populations may reflect difficulties recruiting parents with a diagnosis of BPD to participate in research. For example, Dolman, Jones and Howard (2013) found that mothers experiencing severe mental illness reported fear of stigma and loss of custody which may impact on parents' willingness to talk openly about their experiences. An alternative source of clinical information about the parenting behaviours of people diagnosed with BPD is available through the experiences of clinicians in the field. Kazdin (2008) noted that clinical knowledge can provide a significant and practical contribution to the scientific knowledge base. In particular, he proposed that codifying the experiences of clinicians in practice could assist in generating and testing hypotheses with the aim of improving patient care. Shonkoff (2000) also noted that science, policy and practice conceptualise child development in different ways. This author emphasised the importance of combining these perspectives to open up different ways of thinking and to gather knowledge on the behalf of children and families. In particular, Shonkoff

(2000) noted that clinical judgement can be an important source of wisdom when methodological limitations restrain scientific exploration and when science has yet to establish knowledge in the field.

This study aimed to gather clinical opinions from a diverse range of mental health clinicians who had experience working with families where a parent had a diagnosis of BPD. First, opinions were sought on potential problems faced by parents with a diagnosis of BPD. Second, views on the effectiveness of available parenting resources, supports and interventions for parents with a diagnosis of BPD and their children were also explored. It is anticipated that an improved understanding of parenting within this population will inform models on the possible transgenerational transmission of emotional dysregulation from parent to child. These models could then be utilised to develop targeted intervention programmes with the aim of reducing the likelihood that children of parents with a diagnosis of BPD will go on to develop emotional and behavioural problems.

3.5 Method

3.5.1. Ethics and procedure. This study was approved by the University of Adelaide, School of Psychology Ethics Committee. Clinicians with experience working with families where a parent had been diagnosed with BPD were invited to respond to an online survey of open-ended questions which were then analysed utilising qualitative thematic analysis. The online survey design was selected for its benefits which included the ability to access geographically dispersed participants, ease of distribution, and for providing clinicians with a high degree of anonymity (Braun & Clarke, 2013).

Invitations to participate in the study were posted on a number of online forums where clinicians who treat people with a diagnosis of BPD were likely to frequent, including the dialectical behaviour therapy (DBT) listserv (International; approx. 1850 members), Psychology and Health Forum (South Australia; approx. 1,000 members), DBT Australia Google group (Australia-wide, <50 members), and the Australian Psychological Society website (Australia-wide; approx. 20,000 members).

Ten survey questions explored parenting problems amongst individuals with a diagnosis of BPD and the potential impact of BPD symptoms on parenting. Clinicians were also given the opportunity to make some “other” general comments on this topic. Second, participants were asked what parenting resources, supports or interventions they had observed as effective or ineffective in improving outcomes for parents with a diagnosis of BPD or their children. Finally, mental health clinicians were asked to comment on what treatment components would be essential to include if a parenting intervention were to be developed specifically for parents with a diagnosis of BPD.

It should be noted, that two questions were also asked relating to the potential impact of a parental diagnosis of BPD on children, and factors that might protect children of parents with a diagnosis of BPD from developing emotional or behavioural difficulties. Given that a large amount of data were collected, the findings of the survey were divided into two papers. For a detailed analysis of the findings relating to clinicians’ opinions on the potential impact of a parental diagnosis of BPD on children and protective factors please refer to Bartsch, Roberts, Davies and Proeve (2015b).

3.5.2. Data analysis. Qualitative methods are recommended when exploring relatively new areas of research and when the main goal of the study is to learn more about people's perspectives and experiences (Braun & Clarke, 2013). The data collected in the present study were analysed utilising the thematic analysis approach described by Boyatzis (1998). First, the researcher analysed the responses under each survey question by reading through all responses to gain familiarity with them. Sentences were then grouped into categories expressing similar content. These categories were analysed for themes and then label names and definitions were assigned and recorded in a 'codebook'. After the codebook was formalised, all data were re-checked to ensure that coding was consistent across all units of analysis. There were 691 responses analysed in total for the 10 questions. It should be noted that participants did not complete all questions. The average number of responses per question was $M = 69.10$, with a range of 33 to 104. The average number of words within a response was $M = 30.07$, with the depth of responses ranging from 1-317 words.

3.6 Results

3.6.1. Demographics. The participants in the study were 106 clinicians from Australia ($n=65$), the USA ($n=36$), Canada ($n=2$) and New Zealand ($n=2$). The majority of respondents were female (91%), and the clinicians ages ranged from 19 to 68 years of age ($M = 41.77$, $SD = 11.69$). Clinicians' experience in working with parents with a diagnosis of BPD and/or their children ranged from six months to 29.5 years ($M = 9.10$, $SD = 7.05$). Further demographic details are described in Table 3.

Table 3- Frequencies and Percentages of Sample Demographics (n= 106)

Variable	Frequency	Percentage
<i>Profession</i>		
Psychology	67	63
Social work	25	23
Nursing	5	5
Psychiatry	3	3
Occupational Therapy	2	2
Other	4	4
<i>Client Group</i>		
Parents with a diagnosis of BPD	49	46
Children of parents with a diagnosis of BPD	12	11
Parents with a diagnosis of BPD and their children	40	38
Other	5	5
<i>Therapeutic Model</i>		
Dialectical behaviour therapy	57	54
Attachment-based therapy	18	17
Cognitive behavioural therapy	17	16
Other	14	13
<i>Service Provision</i>		
Assessment, individual and group therapy	38	36
Assessment and individual therapy	28	26
Individual and group therapy	16	15
Assessment only	6	6
Individual therapy only	14	13
Group therapy only	2	2
Other	2	2
<i>Service Setting</i>		
Government-funded services	57	54
Private practice	22	21
Non-government organisation	9	8
More than one of the above service settings	16	15
Other	2	2

3.6.2. Themes. The findings of the current investigation are grouped according to the two main aims of the paper. First, there were seven themes that emerged from clinicians' responses about potential parenting challenges for parents with a diagnosis of BPD. Second, there were three themes that emerged from participant's observations on the effectiveness of parenting resources, supports and interventions for parents with a diagnosis of BPD and/or their children. Direct quotes from participants have been included to demonstrate the themes.

3.6.2.1. Clinicians' observations regarding potential parenting challenges experienced by parents with a diagnosis of BPD.

3.6.2.1.1. Disruption to empathic responsiveness. Clinicians typically reported that parents with a diagnosis of BPD demonstrated difficulties understanding their child's internal states and responding appropriately. For example:

These parents often struggle with emotional regulation, and so they have great difficulty in managing their children's distress... They are often unable to put their child's needs ahead of their own, lack empathy with the child and may make attributions about the child's behaviour being about them (i.e. 'they are punishing me').

The parenting skills of people with BPD vary widely. However, in the most problematic scenario (i.e. a person who was invalidated and abused as a child, who is diagnosed with BPD but has not received effective treatment) the parent can have difficulty understanding and validating their child's emotions due to their own emotional dysregulation, substance abuse or very dysregulated relationships with partners.

This theme was typically mentioned in reference to parents' symptoms of emotional dysregulation:

As they are so awash with their own varying emotional lability, it is very difficult for them to tune into their child's emotions and needs as different from theirs, and to provide a secure base to enable co-regulation of their child's emotional distress. Children have to learn to withdraw and calm themselves or to escalate to gain attention.

3.6.2.1.2. Difficulty maintaining stable environments. Clinicians also indicated that parents with a diagnosis of BPD may have difficulty providing stability and routine in their child's life. This included references to the parent being unable to provide for the child's basic needs such as housing, food, clothing, schooling and a supportive social network. Examples included:

Inability to provide a stable environment. For example, inability to provide food and housing due to impulsive behaviour such as gambling, drug and/or alcohol abuse... poverty due to inability to keep a job. Distancing their children (and themselves) from other family members due to conflicts and tensions within the family. Being absent from their children due to hospitalisation.

Self-injurious behaviour leading to hospitalisation can interfere with the ability to provide continuous parenting. Impulsivity can impede the parent's

ability to stick to a child-appropriate schedule and reduce their ability to provide a stable/nurturing environment.

This theme was typically reported when commenting on the impact of interpersonal dysregulation on parenting. For example, when asked to consider how the parents' symptoms of interpersonal dysregulation impacted on parenting one clinician noted:

These things (sic) decrease the size of the safety net for a child. If the parent is unable to maintain relationships with others, she may not be able to find a babysitter when she needs it or find someone to talk to about her parenting frustrations. One factor that protects children is having multiple stable adults in their lives. However, if the parent cannot maintain relationships with stable adults, this can increase the likelihood that the child will have mental health problems.

3.6.2.1.3. Difficulty managing interpersonal boundaries. Another theme typically reported by clinicians was difficulty managing boundaries between the parent and the child. In particular, clinicians made reference to parents exposing children to developmentally inappropriate information and having an inappropriate understanding and expectations of the child based on their age. Clinicians also noted that some parents were observed to have difficulty separating their own emotional state and personal interpretations from the child's. For example:

Children can be required to play an age inappropriate emotional care-giving role for parents. Parents can struggle with children's developing needs for independence as this may trigger fear of abandonment... Parents can become enmeshed with the child and may not be able to recognise their needs as an individual.

Parents may have difficulty separating their own emotional state and personal interpretations from the child's. They may also struggle to understand the impact of their own issues on the child and fail to take reasonable action to recruit appropriate supports as required.

This theme was typically reported by clinicians when considering parents difficulties in maintaining a stable sense of self. For example, “Role reversals or inappropriate roles may develop between the parent and child (i.e. child caring for parent)”.

3.6.2.1.4. Parenting skill deficits. Clinicians also indicated that parents with a diagnosis of BPD may have problems utilising effective discipline and modelling appropriate behaviours to their children. In particular, clinicians raised concerns that this population of parents may be more likely to model unstable relationships, dissociation, dichotomous thinking styles, and impulsive/destructive behaviours as coping mechanisms. Furthermore, responses also referred to the parent having difficulty consistently setting boundaries and enforcing appropriate consequences. For example:

Typically, a child learns to regulate his or her own emotions through observation and coaching by parents. If a parent is not skilled at emotion regulation herself, the child may not have the opportunity to see and learn effective emotion regulation skills. Also, there is the possibility that if they learn those skills elsewhere, the BPD parent may feel increasing incompetence and respond with invalidating statements and behaviour when the child uses skills effectively, therefore punishing healthy responses by the child.

These parents may have difficulty setting appropriate expectations and boundaries and saying ‘no’ when needed. As most of my clients did not receive adequate parenting themselves, it is hard for them to understand what they should be doing because it was never modelled for them.

This theme was typically reported when clinicians were asked to consider the impact of the parents’ symptoms of cognitive dysregulation on parenting. For example one clinician reported that “black and white thinking can make it difficult for parents to understand how to integrate parenting suggestions from clinicians”.

3.6.2.1.5. Difficulty maintaining safe environments. Respondents also indicated that these parents may have difficulty maintaining safe environments for their children. In particular, some clinicians made reference to children being exposed to domestic violence and/or physical, sexual, or emotional abuse by the parent or partners. There were also some reports of neglect and the involvement of child protection services. For example, one respondent reported that “the parent’s ability to accurately assess safety, danger and appropriate boundaries, as well as ensuring these

for their children, may be compromised depending on their own history of trauma, abuse and invalidating environments”.

This theme was typically reported when clinicians were asked to consider the impact of behavioural dysregulation on parenting. For example:

...alcohol and drug use may lead to a chaotic lifestyle and the child being exposed to inappropriate people and they may be subjected to neglect and abuse from such people or from their parent. ... Parental substance abuse can threaten children's physical, cognitive and emotional health and wellbeing and places children at increased risk for all forms of abuse. In regard to suicidal behaviour, this can be extremely traumatising for a child. A child who witnesses a parent self-harming, attempting suicide or threatening suicide will likely develop emotional and behavioural difficulties and be traumatised by such experiences. I have also had a case in which a young girl attempted suicide because she had witnessed her mother doing this and she had used this as her own coping strategy... If a parent is promiscuous, they may involve themselves with inappropriate partners that could place their children at risk, the parent may place their need for sexual intimacy before the child's needs, and if the children witness such behaviours, they may believe this to be normal and this could place them at risk of sexual abuse.

3.6.2.1.6. *Poor parental self-efficacy*. The final theme was poor parental self-efficacy, which referred to the beliefs or judgments that a parent has of their capability to undertake parenting tasks (Montigny & Lacharite, 2005). For example, clinicians noted:

...as people with BPD find it challenging to be interpersonally effective, it takes significant effort on their part to be successful. It is often demoralizing for them to finally be successful at meeting a child's need at one stage, only for the child to move to another stage which presents different demands. This is often interpreted as failure by the person with BPD.

This theme was typically reported when clinicians considered the parents symptoms relating to an unstable sense of self. For example, “Parents in our program often doubt their ability to parent appropriately and feel hopelessness regarding being able to learn how to parent their children”.

3.6.2.1.7. *Capacity for adaptive parenting*. Finally, some clinicians emphasised that not all parents with a diagnosis of BPD would experience problems, and that this cohort of parents can be motivated and successful in learning strategies to improve their parenting. For example, one clinician noted “I have found that this varies greatly depending on the individual. I have worked with borderline parents [sic] who are able to meet the needs of their children very well”. Other clinicians noted:

In my experience most of the time these behaviours are “reined-in” by the client in the perinatal period. There are some spectacular exceptions to this of course, but

generally speaking this cohort of clients go to great efforts to protect their children from being exposed to suicidal behaviours, parasuicidal acts, impulsive behaviours, alcohol and/or drug abuse, promiscuity etc.

My experience has been that those mums with BPD that engage in therapy are highly motivated to be a good enough parent, and lots of time in therapy is spent focusing on parenting issues and being present for their children.

3.6.2.2. Clinicians' views regarding the effectiveness of parenting resources, supports or interventions in improving outcomes for parents with a diagnosis of BPD and/or their children.

3.6.2.2.1. Psychological interventions. A number of psychological interventions were reported as available for parents with a diagnosis of BPD and their children. DBT was typically mentioned, followed by parenting programmes, attachment-based therapies and general references to therapeutic approaches and supportive counselling. DBT and attachment-based therapies were predominately reported as effective with some recommendations for integrating the approaches:

DBT combined with an attachment-based parenting therapy that involves children (e.g. circle of security approach). DBT provides practical skills related to mental health but circle of security provides an individual focus on relationship issues with the child as well as practical parenting support.

Whilst some clinicians reported parenting programs as effective interventions, just as many clinicians noted that parenting programs in isolation were ineffective.

For example:

Parenting programs that just provide behavioural coaching and parent strategies [are ineffective], as they do not address the emotional needs of either the parent or child, or the internal working models of the world and each other that have been formed. Parents diagnosed with BPD are usually unable to calmly follow through on basic behaviour management strategies as they are too caught up in their own emotionality and interpretations of the assumed intent of their child's actions.

3.6.2.2.2. *Delivery of interventions.* Mental health clinicians also provided comment on the delivery of interventions and factors which they had observed to be effective or ineffective. For example, clinicians reported that treatments were more effective if the parent and child were treated together. Integrated treatment approaches were also reported as effective and parenting interventions that did not address the parents' symptoms of BPD were criticised. Furthermore, supports and resources that were non-judgmental, and incorporated principles of validation were noted to be effective:

We run a DBT program with parents and adolescents who learn skills together in the same group. The parent learns validation and this increases validation towards the child. The child also learns to validate the parent, which helps the parent to regulate.

Finally, clinicians also commented on the length of interventions with long-term and intensive treatment programs being noted as effective as “brief or intermittent treatment does not seem intensive enough to effect change with this chronic diagnosis”.

3.6.2.2.3. Community-based supports. Clinicians’ also made reference to the effectiveness of community-based supports. In particular, a number of non-for-profit organisations that specifically assisted people with a diagnosis of BPD, their families or children of parents with a mental illness were noted to be effective. There were also several references to respite services: “Supportive respite care that is understanding of the parent and validating of their importance as the primary carer [reported as effective]”. Community-based substance abuse programmes were also noted as effective by a few clinicians.

Community-based supports that were noted to be ineffective included references to community mental health team approaches such as case management and hospitalisation. Second, some aspects of child protection practices were criticised, for example “child protection that is reactive, focused on parent's rights rather than child's best interests, and short-sighted. Multiple out-of-home placements and reunifications can be very damaging to attachment and traumatic”. A summary of clinicians’ recommendations for developing parenting interventions for parents with a diagnosis of BPD and their children are summarised in table 4.

Table 4- Summary of Mental Health Clinicians' Recommendations for the Development of Parenting Interventions for Families where a Parent has a Diagnosis of BPD.

<p><i>Recommendations for developing parenting interventions</i></p> <hr/> <ul style="list-style-type: none"> • <i>Psychological interventions</i> <ul style="list-style-type: none"> ○ Dialectical Behaviour Therapy ○ Attachment-based approaches ○ Parenting skills training • <i>Specific psychological strategies.</i> <ul style="list-style-type: none"> ○ Psychoeducation about child development, symptoms of BPD and the impact on parenting ○ Parental empathy skills ○ Emotional regulation skills ○ Mindfulness/acceptance skills ○ Distress tolerance skills ○ Managing children's behaviour ○ Addressing parents' past trauma and the impact on attachment ○ Interpersonal effectiveness skills ○ Dialectical thinking ○ How to develop and maintain children's routines ○ How to keep children safe from harm ○ Teaching parents' self-validation and how to validate their children • <i>Delivery of interventions</i> <ul style="list-style-type: none"> ○ Integration of different treatment approaches ○ Non-judgmental and incorporate principles of validation ○ Provide coaching in skills acquisition ○ Family-focused approaches ○ Long term, intensive treatment options ○ Accessible and affordable ○ Clinicians/treatment teams provided with supervision • <i>Community-based supports</i> <ul style="list-style-type: none"> ○ Access to respite services ○ Access to non-for-profit organisations which provide support around BPD and/or parenting ○ Involvement of child protection services when child safety is at risk ○ Access to stable accommodation
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3.7 Discussion

To the best of the authors' knowledge, this study provides the first qualitative analysis of mental health clinicians' observations of the impact of BPD symptoms on parenting and their views on the effectiveness of available parenting resources, supports and interventions for this cohort of parents and children. It was apparent that clinicians perceived a diagnosis of parental BPD as associated with disruptions to empathic responsiveness, difficulty maintaining stable and safe environments, difficulties managing interpersonal boundaries, parenting skill deficits and poor parental self-efficacy. Clinicians also highlighted that the parenting skills of this population were varied and that parents with a diagnosis of BPD can be capable parents. Second, clinicians discussed the effectiveness of a number of parenting resources, supports and interventions for this population. Finally, recommendations were made for the design of future programmes to address challenges for parents with a diagnosis of BPD and their children. The study findings are discussed in light of the two main research aims.

3.7.1. Parenting challenges. There were a number of similarities between the parenting challenges observed by clinicians and those that have been reported in the literature. For example, when considering the theme of disruption to empathic responsiveness, there is emerging evidence to suggest that mothers with a diagnosis of BPD may have difficulty reading their children's emotional cues (Elliot et al., 2014; Reinelt et al., 2014). For example, Elliot and colleagues (2014) found that mothers with a diagnosis of BPD performed poorly on infant emotion recognition tasks compared to control mothers. Furthermore, Reinelt et al. (2014) found discrepancies

between mothers and adolescents' reports of internalising symptoms. This theme presents a potentially important target for intervention as it has been hypothesised that poor capacity to perceive and respond to a child's emotional cues could lead to invalidation of a child's emotional experiences which could in turn, increase their risk of experiencing emotional dysregulation (Linehan, 1993; Stepp, Whalen, et al., 2012a).

There is also evidence in the literature to support themes relating to parents' difficulty maintaining stable and safe environments. In particular, children of families where a parent has a diagnosis of BPD have been found to be more likely to experience changes to household composition and schooling, and removals from the home, compared to control groups (Feldman et al., 1995). A recent study also found higher rates of BPD symptoms amongst mothers who were involved with child protection services, compared to community controls suggesting the potential for safety concerns amongst this population of families (Perepletchikova et al., 2012).

The authors of the current study noted that the theme 'difficulty managing interpersonal boundaries' was similar to the concept of boundary dissolution, which was defined by Kerig (2005) as a multidimensional construct that incorporates dimensions of enmeshment (i.e. lack of acknowledgement of the separateness between the self and child), intrusiveness (i.e. overly controlling and coercive parenting that intrudes into the child's thoughts and emotions) and role reversal (i.e. parent turns to the child for support). Dimensions of boundary dissolution have also been identified in the literature with studies suggesting that mothers with a diagnosis of BPD are more intrusively insensitive when interacting with their infants (Crandell et al., 2003; Hobson et al., 2005), overprotective when parenting adolescents (Reinelt

et al., 2014) and that their children may be more vulnerable to role reversal (Macfie & Swan, 2009; Zalewski, Stepp, Whalen, & Scott, 2015).

The theme of parenting skill deficits has also been highlighted in the literature. For example, Zalewski et al. (2014) found that maternal symptoms of BPD were related to parenting behaviours characterised by psychological and behavioural control. Furthermore, Stepp, Whalen et al. (2012a) suggested that parents with a diagnosis of BPD may oscillate between over-involved (i.e. intrusive) and under-involved (i.e. avoidant and withdrawn) parenting. More specifically, these authors proposed that inconsistencies in emotional socialisation, as well as discipline and monitoring, could result in an invalidating environment, which may increase the risk that a child will develop their own emotional regulation difficulties. Research is still needed to evaluate and confirm this hypothesis.

Finally, the theme of poor parental self-efficacy is also supported by a number of studies which have shown that mothers with a diagnosis of BPD score lower on measures of parenting efficacy compared to controls (Elliot et al., 2014; Newman et al., 2007). Interestingly, these studies also noted that mothers with a diagnosis of BPD reported greater parenting stress and poor parenting satisfaction compared to control groups. These constructs were not typically reported by clinicians in the present study suggesting that clinical staff may benefit from further education and training around this populations' experience of their parenting journey.

3.7.2. Parenting Interventions. Clinicians were asked to share their observations regarding the effectiveness of interventions for parents with a diagnosis of BPD and their children. It was apparent that clinicians' views on the effectiveness and ineffectiveness of interventions were mixed. However, there was a trend towards

integrating existing treatments such as DBT, parenting skills training, and attachment-based approaches. This is consistent with recommendations that parents with a diagnosis of BPD may benefit from having their adult psychiatric treatment adapted to address parenting issues (Ben-Porath, 2010; Stepp, Whalen, et al., 2012a). Zalewski et al. (2015) recently explored the feasibility of modifying DBT to incorporate parenting skills by interviewing mothers with a diagnosis of BPD who were currently in treatment. Mothers noted a number of potential benefits to this approach including commonality with other mothers, children learning skills, and increased confidence as a parent. However, they also reported a number of challenges such as fear of being judged and fear of exposing their children to other parents with a diagnosis of BPD. Whilst Zalewski et al. (2015) demonstrated that mothers with a diagnosis of BPD were open to having parenting skills integrated into their current psychiatric treatment, there is currently limited research demonstrating the efficacy of this approach.

The parenting challenges for people with BPD identified by clinicians within the current study could be utilised to inform the development of targeted parenting interventions with this population. For example, the integration of treatment programmes would need to consider not only treating the parent's symptoms and teaching parenting skills, but also increasing the parent's capacity to notice, read and interpret their child's emotional cues; coach parents in strategies to maintain stable and safe environments; identify and manage potential boundary violations; and assess and potentially modify cognitions relating to parenting competence. Furthermore, the development of future treatment programs could also be informed by factors associated with adaptive parenting amongst parents with a diagnosis of BPD. However, future research on this topic is required.

3.7.3. Limitations. There are a number of limitations to the current study.

First, the current investigation collected data via an online survey. Although this study design enabled the investigators to collect a broad range of clinician opinions, it did not allow the same level of exploration into clinician perspectives that could have been achieved utilising an interview format. It is recommended that this research be extended to include in-depth interviews with clinical staff.

Second, whilst the views of clinicians provide important insight into the potential impact of a diagnosis of BPD on parenting and the effectiveness of interventions, the impact of stigma should also be considered. For example, studies have shown that clinicians are more likely to report negative emotions when working with patients with a diagnosis of BPD (see Sansone & Sansone, 2013 for a review of the literature). In particular, clinicians were also found to engage in unhelpful behaviours such as distancing, defensiveness, and expressing less empathy and greater anger towards patients with a diagnosis of BPD (Sansone & Sansone, 2013). Therefore, it is possible that stigma could have negatively influenced the responses of clinicians in the present study. In stating this, it should be noted that clinician views were consistent with a number of findings that have been identified within the literature which adds support to the validity of these views. Nevertheless, future research should also interview parents with a diagnosis of BPD about their perspectives relating to parenting challenges to see if they are consistent with clinicians' views and whether new themes emerge.

Third, the current study did not explore clinicians' attitudes towards working with parents with a diagnosis of BPD and their families. For example, a meta-synthesis by Dolman et al. (2013) reported that psychiatrists and psychiatric nurses found working with mothers with severe mental illness anxiety provoking and they

reported that their perceived levels of responsibility increased. Furthermore, the findings of this meta-synthesis revealed that clinicians advocated for increased training amongst mental health staff and better integration of services. Whilst the present study touched on service provision there has yet to be research into clinicians' attitudes towards working with families where a parent has a diagnosis of BPD.

Finally, the questions in the current study were focused on identifying parenting challenges and there was limited scope for clinicians to discuss examples of parents with a diagnosis of BPD who do not experience parenting problems. However, clinicians were given the opportunity to make some general comments and a number of references were made about this population's capacity for adaptive parenting. Further to this, discussion of protective factors for these families are reported in a companion paper (Bartsch et al., 2015b).

In conclusion, the present study aimed to explore clinicians' observations of parenting challenges experienced by those with a diagnosis of BPD. Further, clinicians were asked to comment on the effectiveness of current parenting resources, supports and interventions for this cohort of parents and children. Finally, clinicians made recommendations for the development of future parenting programmes for parents with a diagnosis of BPD. The findings from this study can be utilised to improve training and supervision for clinicians working with parents with a diagnosis of BPD, and to inform the development and evaluation of sensitive parenting assessments and interventions for this group of highly vulnerable families.

Chapter 4: Paper Two

4.1 Preamble

The second paper in the thesis is drawn from the same study as the first paper. While chapter three explored clinician perspectives on potential parenting challenges, the second paper focused on clinicians' observations of the potential impact of a parental diagnosis of BPD on offspring. Furthermore, this paper explored factors that may protect children of parents with a diagnosis of BPD from going on to develop psychosocial problems. A model for the transgenerational transmission of emotional dysregulation from parents with a diagnosis of BPD to offspring was also proposed.

As mentioned in the preamble of the previous paper, the structure of the manuscript presented below has been altered to be consistent with the dissertation formatting which may deviate from the published article (e.g. citations, table and figures headings). In some cases, the date of a publication for a citation may have changed due to the journal article going from early online view to publication. In this case, the latter date is reported to maintain consistency with the current literature. Finally, there may be some variations in the spelling of words as the dissertation is written in Australian English.

**The impact of parental diagnosis of borderline personality disorder on
offspring: Learning from clinical practice**

- PUBLISHED PAPER -

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4.2 Statement of Authorship

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Name of Principal Author (Candidate)	Dianna R. Bartsch		
Contribution to the Paper	Responsible for the development, data collection, data analysis and writing of the paper in collaboration with my supervisors. Served as the corresponding author and was responsible for the submission, revisions and responses to journal reviewers.		
Overall percentage (%)	80%		
Certification:	This paper reports on original research I conducted during the period of my Higher Degree by Research candidature and is not subject to any obligations or contractual agreements with a third party that would constrain its inclusion in this thesis. I am the primary author of this paper.		
Signature		Date	10/11/19

Co-Author Contributions

By signing the Statement of Authorship, each author certifies that:

- i. the candidate's stated contribution to the publication is accurate (as detailed above);
- ii. permission is granted for the candidate to include the publication in the thesis; and
- iii. the sum of all co-author contributions is equal to 100% less the candidate's stated contribution.

Name of Co-Author	Dr Rachel M. Roberts		
Contribution to the Paper	Contributed to the conceptualisation of the research, interpretation of the results and revision of manuscripts. (7.5%)		
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Contribution to the Paper	Contributed to the interpretation of findings and revision of manuscripts. (5%)		
Signature		Date	11/11/19

4.3 Abstract

The aim of this study was to explore mental health clinicians' opinions regarding the impact of a parental diagnosis of borderline personality disorder (BPD) on offspring and factors that may protect these children from developing emotional and/or behavioural difficulties. Expert opinions from 64 clinicians were collected through a voluntary and anonymous online qualitative survey. Thematic analysis of the data revealed five main themes relating to the impact of parental BPD symptoms on offspring. Children in these families were observed to develop behavioural, emotional, and interpersonal difficulties, disturbances to cognitive processes and self-dysfunction. A number of protective factors for offspring were also identified, such as supportive social networks, therapeutic intervention and child and parent characteristics. A model for the transgenerational transmission of emotional dysregulation from parent to child was proposed.

4.4 Introduction

Borderline personality disorder (BPD) is characterised by affective instability, impulsive and/or self-harming behaviours, intense and unstable interpersonal relationships, identity disturbance, chronic feelings of emptiness and cognitive symptoms such as stress-related paranoia and/or severe dissociative symptoms (American Psychiatric Association, 2013). The impact of the disorder is substantial with high rates of emergency department presentations, hospitalisation, poor response to standard treatments and psychosocial difficulties (Ansell et al., 2007). However, this disorder is not only devastating to the individual but also to family members and loved ones (Porr, 2010). In particular, the literature suggests that family members of individuals with BPD may also be at higher risk of mood, impulse, substance use and AXIS II disorders, including BPD (Sansone & Sansone, 2009b).

Given the high rates of psychopathology amongst family members, it has been proposed that the offspring of parents with a diagnosis of BPD may be at particular risk for developing emotional and/or behavioural dysfunction. The literature supports this hypothesis with offspring demonstrating greater risk of disturbed mother-infant interactions (Hobson et al., 2005; Kiel et al., 2011; Newman et al., 2007), disruptive and unstable households (Feldman et al., 1995), higher risk for psychopathology (Abela et al., 2005; Weiss et al., 1996), lower self-esteem, greater rates of suicidal ideation and/or behaviours (Barnow et al., 2006) and interpersonal difficulties in adolescence (Herr et al., 2008).

Although evidence regarding the presence of difficulties for this high-risk population of parents and children is growing, there have been limited investigations into the pathways through which the transgenerational transmission of emotional and

behavioural dysregulation may occur. Newman, Harris and Allen (2011) proposed a model for the transgenerational transmission of interactional disturbance from parent to infant, utilising parents with a diagnosis of BPD as an example. The authors reviewed literature on the development of neurological regulatory systems during infancy, which suggested that not only are these systems shaped through parenting but also the impact of maladaptive development may contribute to the infant's own parenting behaviours in the future. For example, the authors proposed that early trauma, disorganised attachment and neurodevelopmental sequelae may result in the parent developing emotional dysregulation difficulties, poor reflective capacity and a distorted representation of self. It was hypothesised that these symptoms would result in the parent not being attuned to their infant's emotional states. Subsequently, the infant may be at greater risk of experiencing early trauma, disorganised attachment and neurodevelopmental sequelae resulting in poor emotional dysregulation into adulthood. Although this model provides a useful theoretical understanding for how transmission of emotional dysregulation may occur from mother to child, it has yet to be formally tested. In stating this, there is emerging evidence which may support aspects of this model. First, Elliot and colleagues (2014) recently demonstrated that mothers (n=13) with a diagnosis of BPD perform more poorly on infant emotional recognition tasks compared to healthy controls (n=13). In particular, these mothers were more likely to misattribute neutral infant expressions as sad. This lends support to the theory that mothers with a diagnosis of BPD may have difficulties reading their infant's emotional expressions. Secondly, Reinelt et al. (2014) explored longitudinal transmission pathways for BPD symptoms from mother to child utilising data from the Greifswald Family study which investigated 230 families over a 5-year period. They found that maternal symptoms of BPD predicted offspring's borderline

symptoms. In particular, this transmission was mediated by overprotective and rejecting parenting styles and high discrepancies between the mother and the child's reports of internalising problems. The authors proposed that the transmission of BPD symptoms may occur in the context of insensitive parenting, resulting in the child feeling simultaneously rejected and over-protected by their mother, making it difficult for them to predict their parent's behaviour. However, this study was limited as it used dimensional data utilising DSM-III-R criteria and included mothers who would not fulfil the diagnostic criteria for BPD. Further research is required to support these findings in large scale samples of mothers with this diagnosis.

Although the Newman et al. (2011) and Reinelt et al. (2014) models provide a valuable guide to understand the potential transmission of difficulties from mother to offspring, neither considered protective factors which may mediate a child's risk of dysfunction. For example, not all offspring of parents with a diagnosis of BPD will go on to develop psychopathology (Glickauf-Hughes & Mehlman, 1998). Factors such as social connectedness and various coping strategies have been associated with adjustment amongst children of parents with a mental illness (Fraser & Pakenham, 2009). Therefore, it is likely that the development of emotional dysregulation in offspring will be influenced through the transaction of various risk and protective factors.

The current investigation aims to add to the literature by exploring the difficulties observed amongst offspring of parents diagnosed with BPD, through drawing on the experience of experts in the field. Research in this area has been limited and is reliant on small sample sizes due to difficulties engaging this population in treatment and research (Elliot et al., 2014). In such cases, practice-based research, which draws on the expertise of clinicians working in the field, can be an

important source of knowledge (Kazdin, 2008). The current study explores the potential impact of a parental diagnosis of BPD on offspring as well as protective factors. It is hoped that this knowledge will inform hypothetical models for the potential transmission of emotional dysregulation, which can be used to guide the development of early intervention programmes.

4.5 Method

4.5.1. Procedure. The study was approved by the University of Adelaide, School of Psychology Ethics subcommittee. A voluntary and anonymous online survey was disseminated to mental health clinicians, inviting responses from those who worked with individuals with a diagnosis of BPD and/or their children. Recruitment was advertised on several online forums, including the Dialectical Behaviour Therapy (DBT) listserv (international), the Psychology and Health Forum (South Australia), Australian DBT Google group, and the Australian Psychological Society website (Australia). These forums were selected as they were frequented by clinicians who work with individuals with a diagnosis of BPD. The current study represents a subset of data from a larger project investigating the impact of a parental diagnosis of BPD on parenting behaviours.

4.5.2. Measures. A qualitative interview format was utilised, and open-ended responses were sought to answer the following research questions:

- (1) In your experience of working with children of parents with a confirmed diagnosis of BPD, how do the symptoms of parental BPD impact on offspring? Examples may include emotional, behavioural, or psychosocial difficulties.

(2) What factors have you observed that might ‘protect’ children of parents with BPD from developing emotional or behavioural problems?

4.5.3. Data Analysis. A qualitative approach was taken to data collection as this method provides the flexibility to gather and summarise a broad range of clinical observations (Braun & Clarke, 2006). In contrast, a quantitative approach would have restricted participants’ feedback to the constructs that the researcher felt were relevant and would not have allowed for unanticipated insights. In particular, the data were analysed utilising a thematic analysis approach as described by Boyatzis (1998). First, the researcher read through all the responses to gain familiarity with the data. Second, sentences expressing similar content were grouped into categories which were then analysed for themes. As themes were identified, label names and definitions were assigned and collated into a codebook. Once the codebook was formalised, the data were re-checked to ensure that the coding was consistent across the entire dataset.

Once the coding process was completed, a researcher independent to the study was recruited to assess the inter-rater reliability of the code. The reliability coder was provided with a subset of 15% of the total number of units to code because of the large number of responses collected (i.e. number of units for coding=120). The reliability coder was asked to code for the presence/absence of themes so that percentage agreement could be calculated (Boyatzis, 1998). The percentage agreement in the current study was at a satisfactory level (i.e. 77%).

4.6 Results

4.6.1. Demographics. Participant demographics differed between the two questions and are described in Table 1.

Table 5. Frequencies and Percentages of Sample Demographics.

Variable	Question 1 (n= 56)	Question 2 (n=64)
	<i>N</i> (%)	<i>N</i> (%)
Gender		
Female	52 (93)	57 (89)
Male	4 (7)	7 (11)
Country		
Australia	40 (71)	42 (66)
USA	14 (25)	19 (30)
New Zealand	2 (4)	2 (3)
Canada	-	1 (1)
Profession		
Psychology	37 (66)	40 (63)
Social work	13 (23)	15 (23)
Nursing	2 (4)	3 (5)
Psychiatry	1 (2)	2 (3)
Occupational Therapy	2 (4)	2 (3)
Other	1 (2)	2 (3)
Client group		
Parents with a diagnosis of BPD	16 (29)	20 (31)
Children of parents with a diagnosis of BPD	9 (16)	10 (16)
Therapeutic model		
Dialectical behaviour therapy	22 (39)	28 (44)
Attachment-based therapies	13 (23)	13 (20)

Cognitive behavioural therapy	13 (23)	14 (22)
Other	8 (14)	9 (14)
Service provision		
Assessment, individual and group therapy	17 (30)	20 (31)
Assessment and individual therapy	20 (36)	23 (36)
Individual and group therapy	5 (9)	8 (13)
Assessment only	5 (9)	5 (8)
Individual therapy only	8 (14)	7 (11)
Other	1 (2)	1 (2)
Service setting		
Government-funded services	30 (54)	33 (52)
Private practice	11 (20)	16 (25)
Non-government organisation	5 (9)	5 (8)
More than one of the above service settings	9 (16)	9 (14)
Other	1 (2)	1 (2)

Note: Due to rounding up, not all percentages add up to 100%.

4.6.2. Thematic Analysis. The results of the thematic analysis are presented in relation to the two main questions being asked.

4.6.2.1. Question 1: *In your experience of working with children of parents with a confirmed diagnosis of BPD, how do the symptoms of parental BPD impact on offspring?* The results of the thematic analysis revealed five clusters of problems that have been observed amongst the offspring of parents with a diagnosis of BPD. A total of 58 respondents answered this question. The themes included behavioural problems, emotional dysregulation, interpersonal difficulties, cognitive dysregulation and disturbed self-concept.

4.6.2.1.1. Behavioural problems. The most frequently cited issues for offspring of parents with BPD were behavioural problems which were mentioned by approximately 73% of clinicians. Common responses included offspring exhibiting signs of impulsivity, self-harming behaviours/suicide attempts and parentification. Verbatim responses included:

Child is more controlling and manipulative in their behaviours (i.e. controls play with clinician). Externalising (aggressive behaviours) or internalising behaviours; or may oscillate between both. Child was also protective of their parent and felt responsible for caring for their parent (including hitting mum's domestic violence partners) - Participant 51.

4.6.2.1.2. Emotional dysregulation. The second most common theme referred to children being vulnerable to their own emotional dysregulation. Approximately, 66% of clinicians mentioned that offspring may have difficulties learning to regulate their own mood states. More extreme examples included references to offspring fulfilling the criteria for AXIS I disorders with some children even observed to be exhibiting early signs of BPD symptoms. Verbatim responses that fell into this theme included the following:

A tendency to suppress emotions and to avoid experiencing and expressing them (associated with a history of emotional expression being punished earlier in their lives) e.g. 'I never told my mother anything that I felt upset about because she'd either get angry with me, or angry about the situation that had

upset me. It felt like she sucked up all the emotional energy and there was no room for me to express my emotions’ – Participant 13.

4.6.2.1.3. Interpersonal difficulties. The third most frequently cited theme was interpersonal difficulties, which were reported by approximately 59% of clinicians. This theme was identified by references to how parental symptoms of BPD may impact on the child’s development of social skills and their ability to interact with others. Verbatim responses included the following:

In my experience, children of parents with BPD tend to have difficulty with relationships. Sometimes they are desperate to acquire relationships outside of the family, sometimes they are unable to trust others enough to establish relationships, and sometimes they are not skilled enough to maintain a healthy relationship - Participant 10.

4.6.2.1.4. Cognitive dysregulation and self dysfunction. The final two themes were each indicated by approximately 40% of the clinicians interviewed. Cognitive dysregulation was defined by responses that mentioned how parental symptoms of BPD might impact on the child’s thinking processes. More specifically, this included references to cognitive disturbances such as black and white thinking, hypervigilance, dissociation, paranoia, distorted beliefs about what is ‘normal’ and the potential impact on academic performance. Examples of verbatim responses included ‘the child never knowing what to expect...’ (Participant 6) and ‘...learning disorder is common, as is language delay for some children’ (Participant 41).

Second, 40% of clinicians identified issues which were examples of offspring experiencing self dysfunction. Presence of this theme was indicated in responses that referred to offspring experiencing feelings of emptiness, low self-esteem, and an over-developed sense of responsibility for the parent that was associated with feelings of guilt and shame. Examples included the following:

The teenager blaming themselves for hurting their parent by not being a better child... I had a client whose mother would talk about suicidal ideation in relation to the child's behaviour. The child was then forced into a caretaker role and a position of immense guilt for normal adolescent behaviours – Participant 3.

4.6.2.2. Question 2: What factors have you observed that might ‘protect’ children of parents with BPD from developing emotional or behavioural problems?

Qualitative analysis identified five themes relating to factors that are likely to protect the offspring of parents with a diagnosis of BPD from emotional and/or behavioural problems. A total of 64 clinicians provided comment on this question.

The most commonly identified theme, as indicated by approximately 77% of respondents, was having a supportive and consistent role model and/or healthy social supports. Examples of supportive relationships included having another parent who did not have a diagnosis of BPD or other personality disorder, supportive siblings, a consistent extended family member (i.e. grandparent, aunt etc.) or another stable role model in the community (i.e. school teacher, coach, youth worker, police officer etc). It was hypothesised that having a consistent role model could provide a stable base for

the child, provide validation and emotional support and could model adaptive coping behaviours and healthy relationship dynamics.

The second most commonly cited protective factor was therapeutic intervention which was cited by 56% of respondents. A number of different aims were mentioned for therapy including providing psychoeducation about BPD and symptom management to the parent and child, the potential impact of symptoms on parenting behaviours, teaching parenting skills and respite/in home support where needed.

Third, approximately 39% of responses referred to either child or parent characteristics as potentially protective. For example, children were deemed to be protected from adverse outcomes if they had a calm temperament, engaging personal qualities, were intelligent, educated, had good social skills and participated in hobbies and activities that helped them to feel good about themselves. Furthermore, children who were able to develop insight into their parent's illness, and avoided taking responsibility for their parent's difficulties, were more likely to be protected from adverse consequences than children who took responsibility for their parent.

Parent characteristics that were likely to be protective for children included the parent's ability to reflect on their illness and its impact on offspring, severity of parent's symptoms, willingness to engage in treatment, ability to contain distress in front of children and ability to validate their children's responses. Personal qualities such as intelligence and/or being able to function well in some contexts (i.e. employment) were also identified.

Finally, a smaller proportion of respondents identified child protection services (16%) and socioeconomic factors (5%) as protective.

4.7 Discussion

The current study provides further evidence that children of parents diagnosed with BPD may be at risk of experiencing dysfunction across a number of domains. In particular, these children were most often described as exhibiting behavioural problems. Interestingly, it was noted that these problematic behaviours reflected dialectical extremes of over-controlled vs. dysregulated behaviours. For example, on one end of the dialectic clinicians described offspring who took on the role of ‘parent’ and ‘protector’, whereas other clinicians described children who developed externalising behaviours such as aggression, substance abuse and/or suicidal behaviours. This finding is consistent with the literature which suggests that whilst some offspring of parents with BPD are at greater risk of disruptive behavioural disorders, other offspring rate highly on measures of harm avoidance which is associated with anxiety and more passive interpersonal behaviours (Barnow et al., 2006; Weiss et al., 1996).

Clinicians also reported that supportive and consistent role models, social support networks, therapeutic intervention and child and parent characteristics were likely to influence outcomes for offspring of parents with a diagnosis of BPD. These factors were similar to those reported in studies exploring resilience in children at risk of chronic adversity (Masten, Best, & Garmezy, 1990). Given that not all children of parents with a diagnosis of BPD will go on to develop significant mental health concerns, transgenerational transmission of emotional dysregulation should be considered within a transactional model which takes into account both risk and protective factors.

Linehan (1993) described a biosocial theory for the development of BPD. This model is transactional and proposes that emotional dysregulation may occur in the context of biological vulnerability and exposure to invalidating environments (i.e. where emotional experiences are not responded to consistently or appropriately), as well as from their interaction and transaction over time. For individuals diagnosed with BPD, the core feature of emotional dysregulation inhibits the sufferer's ability to regulate their behaviour, interpersonal relationships, cognition, and can result in a failure to develop a stable identity (see Figure 1).

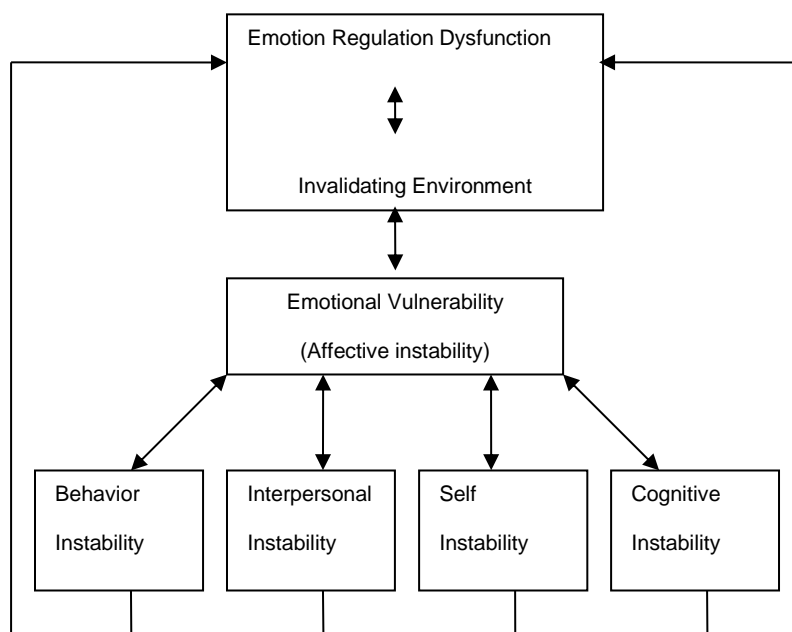


Figure 1. The biosocial model for the development of BPD by Linehan (1993, p.60). Copyright Guildford Press. Reprinted with permission of The Guildford Press.

This model can also inform the pathways through which emotional and/or behavioural difficulties may transfer from untreated parents to offspring. For example, there is evidence that the risk of BPD may be transmitted genetically with family members being at greater risk of having the disorder (Links, Steiner, & Huxley, 1988; Torgersen et al., 2000). Furthermore, Silverman and colleagues (1991) found that affective and impulsive personality traits were independently greater in the relatives of borderline probands compared to those with other personality disorders. There is also evidence suggesting that some children of parents with a diagnosis of BPD may also be exposed to invalidating environments. For example, Elliot et al. (2014) and Reinelt et al. (2014) both provided evidence which suggested that parents with a diagnosis of BPD may have difficulty reading their child's emotional states. This may inadvertently lead to invalidating responses. Furthermore, a recent study of parents who had their children removed by child protective services found that nearly one in five of these mothers reported symptoms consistent with a diagnosis of BPD (Pereplechikova et al., 2012). This combination of factors, in the absence of protective influences, may leave offspring vulnerable to developing patterns of emotional, behavioural, interpersonal, cognitive and/or self dysregulation. The potential for intergenerational transmission of these difficulties is demonstrated in Figure 2.

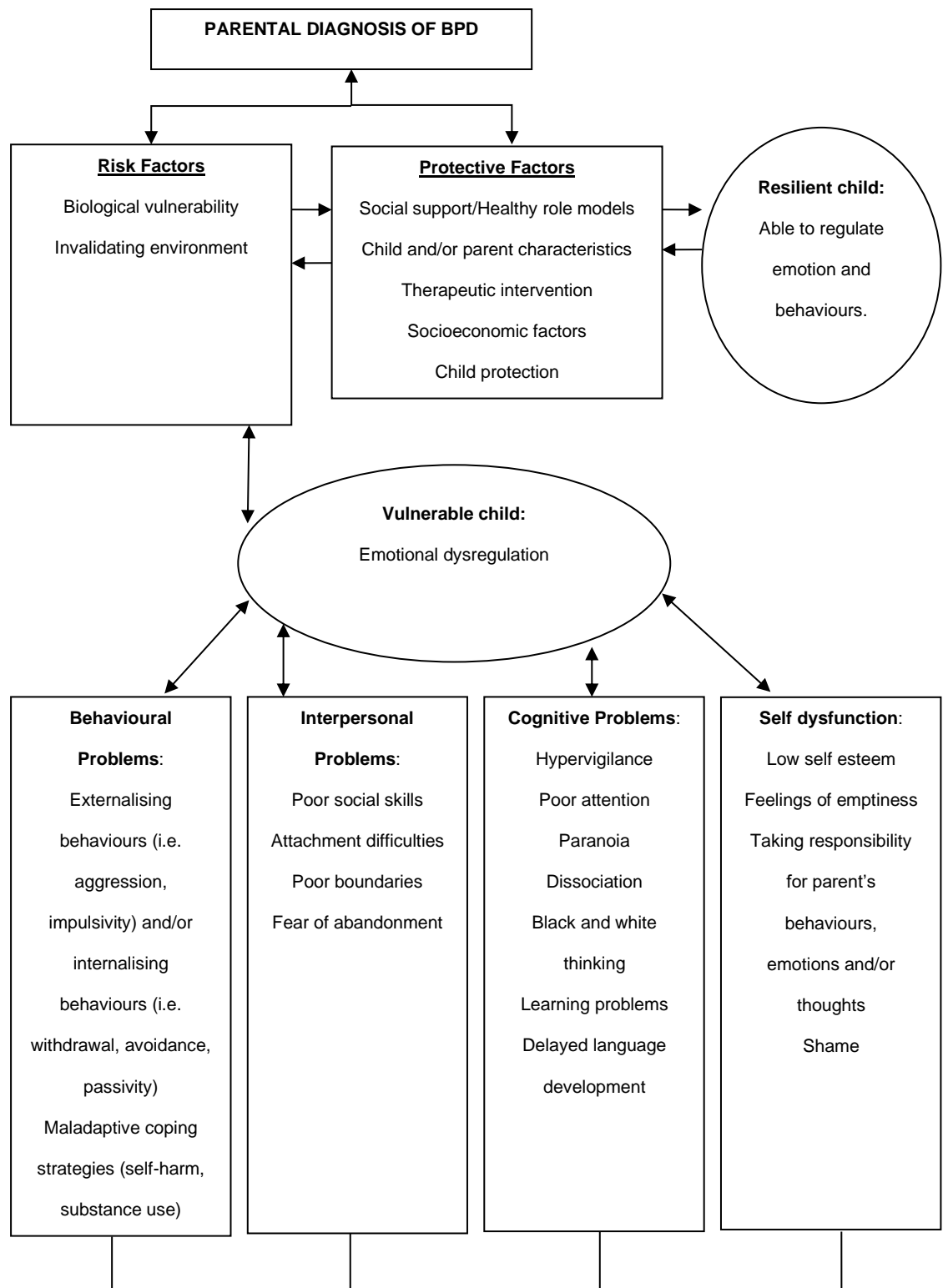


Figure 2. Model proposed to demonstrate the potential for transgenerational transmission of emotional dysregulation from parent diagnosed with BPD to offspring.

The transactional nature of this model also takes into consideration the bidirectional nature of risk factors. For example, Zalewski and Lengua (2012) noted that children with calmer temperaments may be less likely to elicit negative parenting behaviours and thus may be protected from developing difficulties. On the other hand, a sibling with an explosive temperament may trigger emotional dysregulation in the parent and ineffective parenting practices. Alternatively, Fruzzetti (2012) also considered that a parent with BPD may be more likely to relate to, and subsequently validate, an explosive child's experience. Fruzzetti (2012) also hypothesised that if this parent had also learnt skills to regulate their emotion, they would be in a good position to model effective coping strategies to this child. However, further research is required to explore the transactional nature of parenting behaviours and offspring psychopathology in this population.

The proposed model also provides a framework from which interventions could be developed. This is particularly important as preventative interventions for parents with a mental illness have been found to reduce the risk to offspring by 40% (Siegenthaler et al., 2012). However, to date there has been limited investigation into the effectiveness of parenting interventions specific to this population.

There are a number of limitations to the current study. First, this research was reliant on clinician opinion and as such was vulnerable to clinician bias. In particular, it should be noted that the majority of clinicians who participated in the research were trained in DBT, and therefore, this model is likely to have influenced their responses. Furthermore, almost half of the clinicians only worked with either the parent or child which may have limited their direct observations of interactional disturbances. However, despite these limitations, utilising clinical opinions is a useful way to gain a

broad perspective on difficulties for a client group who are particularly difficult to engage in treatment and research. It is recommended that the model derived through this exploratory paper be validated with families where a parent has BPD utilising quantitative research methods. Second, the study did not control for the high co-morbidity in diagnosis common to BPD (i.e. mood disorders, substance use disorders and other AXIS II conditions). As a result, we cannot comment on whether the observed impact on offspring is specific to BPD symptomology or co-occurring problems. However, it should be noted that consumers in clinical contexts often present with high co-morbidity and therefore the present study may represent greater ecological validity. Third, the present study explored the impact of parental BPD on children in general, without reference to any particular developmental period. It is acknowledged that a child's vulnerability and parenting challenges will differ across developmental periods (Fudge, Falkov, Kowalenko, & Robinson, 2004). Therefore, this model should be interpreted in the context of the child's developmental stage.

In sum, clinicians in real world context have reported that offspring of parents with a diagnosis of BPD may be more vulnerable to developing difficulties in regulating their moods, behaviours and cognition, developing and maintaining relationship, and self dysfunction. A transactional model is proposed to explain the potential for transgenerational transmission of disturbance from parent to child. Further research is required to validate this model, utilising more rigorous scientific methods. It is hoped that through improving our knowledge of the challenges experienced by offspring of parents with a diagnosis of BPD, clinicians can tailor interventions to support this group and reduce their risk of mental health concerns.

Chapter 5: Paper Three

5.1 Preamble

The fifth chapter in the thesis presents the third published paper, which aimed to understand mental health service-users' experiences of being a parent and having a diagnosis of BPD. At the time this research commenced qualitative investigations in this area were lacking. As such, a qualitative research design was utilised to explore mental health service-users experiences through focus groups and interviews to gain an in-depth understanding of parents' experience of 'parenting' and accessibility to local parenting supports. The data obtained were analysed utilising thematic analysis.

The collation of both clinician and parent (with a diagnosis of BPD) perspectives on parenting and availability and suitability of parenting supports demonstrates an in-depth consideration of the topic. Furthermore, the collection of both viewpoints provides the opportunity to verify the themes given that both sources have the potential to be influenced by bias (e.g. stigma among clinicians or social desirability bias from service-users).

It should be noted that the thesis version of this paper will vary slightly from the original article. For example, the format of citations will differ if they have already been presented in the thesis. Second, the journal article headings, table and figure numbers have been altered to match the thesis formatting. Finally, the journal practice points are not reported in the thesis.

**Understanding the experience of parents with a diagnosis of borderline
personality disorder.**

- PUBLISHED PAPER -

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5.2 Statement of Authorship

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Principal Author

Name of Principal Author (Candidate)	Dianna R. Bartsch		
Contribution to the Paper	Responsible for the development, data collection, data analysis and writing of the paper in collaboration with my supervisors. Served as the corresponding author and was responsible for the submission, revisions and responses to journal reviewers.		
Overall percentage (%)	80%		
Certification:	This paper reports on original research I conducted during the period of my Higher Degree by Research candidature and is not subject to any obligations or contractual agreements with a third party that would constrain its inclusion in this thesis. I am the primary author of this paper.		
Signature		Date	10/11/19

Co-Author Contributions

By signing the Statement of Authorship, each author certifies that:

- the candidate's stated contribution to the publication is accurate (as detailed above);
- permission is granted for the candidate to include the publication in the thesis; and
- the sum of all co-author contributions is equal to 100% less the candidate's stated contribution.

Name of Co-Author	Dr Rachel M. Roberts		
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Signature		Date	11/11/19

5.3 Abstract

A parental diagnosis of borderline personality disorder has been associated with high levels of parenting distress and greater risk of psychopathology and psychosocial issues among their children. The aim of the present study was to investigate the experience of parents who have a diagnosis of borderline personality disorder and their perceptions regarding access to appropriate parenting supports and resources.

Eleven mothers and one father with a past and/or present diagnosis of borderline personality disorder participated in focus groups in which they were asked questions about their experiences of parenting and service provision. Participants were aged between 29 and 59 years ($M = 40.17$; standard deviation = 9.53), and the majority identified themselves as Caucasian (83%). The study design was qualitative, and thematic analysis was utilised to identify common themes.

Thematic analysis identified four key themes of parenting challenges, parenting rewards, barriers to accessing support, and recommendations for improving parenting experience. Seventeen subthemes were also identified and are represented graphically.

Parents with a diagnosis of borderline personality disorder find parenting both a challenging and rewarding experience. Whilst a number of themes identified by parents with a diagnosis of borderline personality disorder are similar to those reported by parents with other forms of severe mental illness (i.e. rewards, stigma, fear of custody loss and negative service provision experiences), there was also evidence of specific themes relating to the symptoms of borderline personality disorder and parenting. Recommendations are provided for improving services for these parents.

5.4 Introduction

It is estimated that at least one in five children in Australia lives in a household where a parent experiences mental illness (Maybery et al., 2009). Consequently, literature examining the impact of parental mental illness on offspring has gained increasing attention. To date, studies have predominantly focused on difficulties in the parent-child relationship and outcomes for children. However, emerging literature acknowledges the lived experiences of parents with a diagnosis of severe mental illness. Dolman, Jones and Howard (2013) recently conducted a review of 23 qualitative studies summarising the experiences of 355 women diagnosed with severe mental illness (e.g. schizophrenia, bipolar disorder, and other related disorders). They identified consistent themes across the studies, including stigma, guilt, custody loss, concern regarding effects on the child, isolation, coping with dual identities, the centrality of motherhood and positive and negative views of service provision. However, in reviewing the participant demographics, consumers with a diagnosis of borderline personality disorder (BPD) were underrepresented in the sample.

BPD is a serious and pervasive mental health condition characterised by dysregulation of emotions, behaviour, interpersonal relationships, cognition, and an unstable sense of self (APA, 2013). In comparison to mood, anxiety and other personality disorders, BPD is associated with more severe levels of psychosocial dysfunction and greater service utilisation (Ansell et al., 2007). Furthermore, children and adolescents of parents with a diagnosis of BPD have been found to be at greater risk of emotional and behavioural problems and are more likely to experience psychosocial difficulties, compared to offspring of parents with diagnoses of

depression or other personality disorders (Abela et al., 2005; Barnow et al., 2006; Feldman et al., 1995; Weiss et al., 1996).

It has been hypothesised that parenting behaviours may play an important role in the potential transmission of emotional and behavioural dysregulation from parents with a diagnosis of BPD to their children (Bartsch, Roberts, Davies, & Proeve, 2015b; Reinelt et al., 2014; Zalewski et al., 2014). However, there are few studies exploring self-reports of parenting attitudes and behaviours by parents with a diagnosis of BPD. In one of the few studies that did examine parenting perspectives, Newman and colleagues (2007) asked 17 mothers with a diagnosis of BPD to complete measures of parental self-efficacy and stress. They found that mothers with a diagnosis of BPD reported significantly greater levels of parenting distress, greater difficulties coping with their parenting role, and poorer parenting satisfaction and efficacy compared with mothers without a diagnosis of BPD. Mothers with a diagnosis of BPD were also assessed as experiencing parenting stress in the clinically significant range. More recently, Elliot and colleagues (2014) asked 13 mothers with a diagnosis of BPD to complete a parenting stress index and the Parental Cognitions and Conduct Toward the Infant scale. The authors found that mothers with a diagnosis of BPD reported significantly higher scores on measures of parental overprotection, and they were less likely to perceive themselves as having an impact on their child's emotions and behaviours compared to normal controls. Similar to the findings of Newman et al. (2007), these mothers also demonstrated lower levels of perceived parenting self-efficacy, and higher levels of parental distress and difficulties in parenting-child interactions, when compared with mothers in the control group. While both of these studies provide important insight into experiences of parenting by parents with a diagnosis of BPD, the findings of these quantitative studies are restricted to the

constructs assessed within the questionnaires. An alternative source of information about parenting experiences can be obtained from qualitative studies, such as those summarised by Dolman et al. (2013). Given that parents with a diagnosis of BPD and their children have been identified as being at greater risk of disturbance than families where a parent has another diagnosis of mental illness, it is not clear whether themes identified in those studies will be relevant to them.

The aim of the present study was to begin to address the gap in the literature relating to the paucity of published qualitative investigations exploring the lived experiences of parents with a diagnosis of BPD. Furthermore, there are no known investigations into these parents' perceptions about the accessibility of parenting supports within the Australian context. The present study utilised qualitative methods to enable a rich and detailed exploration of participants' experiences and perspectives without forcing data into predetermined categories. This method is service-user focused and enables the opportunity to garner unanticipated insights. Increased knowledge about the impact of a parental diagnosis of BPD will hopefully enable the development of targeted interventions for these families, and subsequently reduce risk for both parent and child.

5.5 Methods

5.5.1. Participants. Participants in the study were 12 parents with a past and/or present diagnosis of BPD. The majority of parents were mothers ($n=11$), and participants were aged between 29 and 59 years ($M= 40.17$; standard deviation (SD)= 9.53). Participants identified themselves as Caucasian (83%), while one person identified as Aboriginal and another as Asian Australian. Most of the sample was married or in a de facto relationship (58%), followed by 25% of the sample who were

separated and 17% who were single/never married. All of the mothers in the sample were separated or divorced from the fathers of at least some of their biological children. The one father in the study was still in a relationship with the mother of his child.

The educational status of participants was varied, with 25% of the sample indicating that primary school was their highest level of education achieved, followed by high school (33%), and training and further education courses (25%). One participant in the sample had an undergraduate university degree, while another had completed post-graduate studies. In general, the majority of participants were not in the workforce (67%), while two individuals had part-time work, and another two were in full-time employment. Nine of the parents indicated that their main income was from a government pension, and three participants relied on private income. Eleven participants indicated that they had experienced one or more hospital admissions since the birth of their first child ($M = 6.42$; $SD = 5.74$)

The McLean Screening Instrument for Borderline Personality Disorder (Zanarini et al., 2003) indicated that 11 of the participants fulfilled the diagnosis of BPD at the time of the focus group ($M = 8.75$; $SD = 1.82$). One participant no longer met the criteria for the BPD diagnosis. However, this person's data were retained as they had been a parent with a diagnosis of BPD within the last 12 months, and the study included retrospective accounts of parenting experiences.

Data were also collected regarding offspring of participants. There were 28 children across the 12 families investigated. The majority of children were male (57%), and their ages ranged from 2 months old to 34 years ($M = 16.02$; $SD = 9.00$). Demographic data for the children are described in Table 6.

Table 6. Demographic Characteristics of Children (n=28) of Parents with a Diagnosis of Borderline Personality Disorder (BPD).

Characteristics	0-3 years	4-10 years	11-17 years	18 + years
<i>Age</i>	4	4	5	15
<i>Gender</i>				
Female	3	1	2	6
Male	1	3	3	9
<i>Relationship to Parent</i>				
Biological child	4	3	5	14
Step child	0	1	0	1
<i>Lives with parent with BPD diagnosis</i>				
†Yes	4	4	2	2
No	0	0	3	13
<i>Contact with parent</i>				
Daily	4	2	0	2
Weekly	0	2	4	5
Monthly	0	0	1	5
Less than monthly	0	0	0	3

† Includes children in both full time and shared custody arrangements.

Parents of children aged between 4 and 17 years old ($n=9$) completed the Strengths and Difficulties Questionnaire (Goodman, 1997) to explore their child's functioning in the domains of emotional symptoms, conduct problems, hyperactivity,

peer problems, and prosocial behaviour. Table 7 demonstrates the number of children who fell into the normal, borderline and abnormal ranges on each of the subscales.

Table 7. Number of Children (n=9) in the Normal, Borderline, and Abnormal ranges on the Strengths and Difficulties Questionnaire.

Subscale	Normal	Borderline	Abnormal
Emotional symptoms	5	0	4
Conduct Problems	5	1	3
Hyperactivity	5	0	4
Peer Problems	6	1	2
Prosocial Behaviour	8	0	1
Total Scale Score	5	0	4

5.5.2. Procedure. This study was approved by the Human Research Ethics Committee of the Queen Elizabeth Hospital. Participants were recruited from an adult community mental health dialectical behaviour therapy (DBT) skills training group programme in Western Adelaide, South Australia in late 2011. At the time, public sector mental health services were the main provider of DBT programmes in the state. The programme was freely available to people who had been assessed as having a diagnosis of BPD by their treating general practitioner, psychiatrist or psychologist. Referrals to the programme were accepted from both within the public sector and from private practitioners. Suitability for the DBT programme, including confirmation of diagnosis, was undertaken by mental health professionals trained in DBT, prior to participation in the skills training group.

Determining sample size in qualitative research can be challenging as there are no clear guidelines stating what is acceptable (Braun & Clarke, 2013). As such, the authors were guided by precedents set by previous qualitative research with parents with a diagnosis of mental illness. Drawing on the 20 studies summarised by Dolman et al. (2013), it was evident that sample sizes with these populations ranged from 5 to 42 participants ($M = 17.32$, $SD = 9.62$). The sample size of the present study was equal to or greater than 45% of previous research in the field. Furthermore, given that parents with a diagnosis of BPD are considered a 'hard to reach group' in research, it was anticipated that recruitment numbers would be lower than average.

Service records indicated that of the 100 past and present DBT group participants, 46% could be clearly identified as parents. Of this group, 31 people were sent letters inviting them to participate in the project. Past DBT participants were not sent recruitment letters if they had a history of poor engagement with treatment services in the past or where there were no current contact details. The final sample size was 12, and therefore participation rate was estimated as 39%. The principle of saturation was utilised to guide the decision to cease recruitment, as no new themes were being reported.

Prior to commencing the focus groups, participants received the patient information sheet and provided informed consent. Participants then completed a demographic questionnaire and the McLean Screening Instrument. Parents of children aged between 4 and 17 were also asked to complete the SDQ for children who fell within this age range. The purpose of including this measure was to provide additional descriptive information about the family context. For example, given the bi-directional nature of parenting, families where children experience significant emotional and/or behavioural difficulties may face additional challenges compared to

families where children fall in the normal range on these indices. Participants were reimbursed for their time with a \$20 gift voucher.

5.5.3. Measures.

5.5.3.1. *McLean Screening Instrument for Borderline Personality Disorder*

(Zanarini et al., 2003) is a brief 10-item screening tool that is commonly used within local mental health services to screen for the presence of BPD. A score of 7 or greater has been shown to correctly identify the presence of BPD in 81% of individuals 26 years of age and older, and in 90% of individuals 25 years and younger (Zanarini et al., 2003).

5.5.3.2. *The SDQ* (Goodman, 1997) is a brief screening tool for children between 4 and 17 years of age. The present study utilises the parent rating form which assesses a child's attributes over five subscales: emotional symptoms, conduct behaviour, hyperactivity/inattention, peer relationship problems, and prosocial behaviours. Two forms were utilised, one for children aged 4-10 years of age, and the other for adolescents aged 11-17 years. Items were scored on a 3-point Likert scale ranging from 0 (not at all) to 2 (certainly true), and higher scores reflected a greater loading of items on that attribute. The SDQ has been normed with an Australian population and has been demonstrated to be a reliable and valid brief screening instrument for child and adolescent mental health problems (Mellor, 2005).

A qualitative interview format was selected to enhance the richness of the data gathered (Braun & Clarke, 2013). Two registered clinical psychologists, both intensively trained in DBT, facilitated the focus group sessions. Data were collected

utilising a semi-structured interview in which all participants were asked the same open-ended questions. Interviewers used probing questions to encourage elaboration where appropriate. However, leading questions were avoided. Responses were sought to answer questions relating to participants' parenting experiences (including the impact of their symptoms on parenting and other aspects of treatment), the impact of parenting on their mental health, and access to and the evaluation of available parenting resources. Finally participants were asked to recommend skills or resources to improve their parenting experience.

5.5.4. Data Analysis. The focus group interviews were audio-taped, then transcribed verbatim and prepared for data analysis. Interviews were de-identified to protect the confidentiality of participants' responses. Given the lack of qualitative analyses amongst parents with a diagnosis of BPD, an exploratory approach was undertaken. In particular, thematic analysis was selected as the methodology to enable an inductive data-driven analysis of the dataset, allowing themes to emerge. The authors note that qualitative research values subjectivity and that it is important to acknowledge how our own theoretical orientations may influence the knowledge produced in this article. In particular, the first author is a clinical psychologist intensively trained in DBT. The other authors of the paper are registered clinical psychologists without advanced training in DBT.

NVivo v. 9 (QSR International, 2010) was utilised to undertake the thematic analysis of the data in line with Braun and Clarke's (2013) recommended six stages of coding and analysis. The first author systematically reviewed the whole transcript and the full dataset was coded into nodes. These nodes were examined and patterns were identified and grouped into broader themes. Tree maps were also utilised to better

understand the data and consolidate the themes. It should be noted that a coding template from a previous qualitative analysis of parenting experiences among patients with BPD was used for comparison purposes (Bartsch, Roberts, Davies, & Proeve, 2015a). The coding template included a list of theme definitions as well as inclusion and exclusion criteria. There were some similarities in the themes that emerged. However, new codes and themes were also identified within the current study and the coding template was amended accordingly. The co-facilitator of the focus groups, who was independent to the research team, was provided with a subsample of the transcripts and the coding template for review. This clinician coded a portion of the transcript utilising the coding template, and there was a high level of consistency between their coding and that of the research team. The clinician also reported that the themes were consistent with their observations of the focus group discussions. The themes were also reviewed a number of times during face-to-face meetings with the second and fourth authors of the current article. The themes were updated based on these discussions with consensus being reached on the final organisation of themes. The process undertaken in the current study met the quality criteria for good thematic analysis as described by Braun and Clarke (2013, p. 287). Findings are reported by themes and include participant quotes to demonstrate typical examples of the subthemes.

5.6 Results

The analysis produced a set of four key themes and 17 subthemes, which are graphically represented in Figure 3.

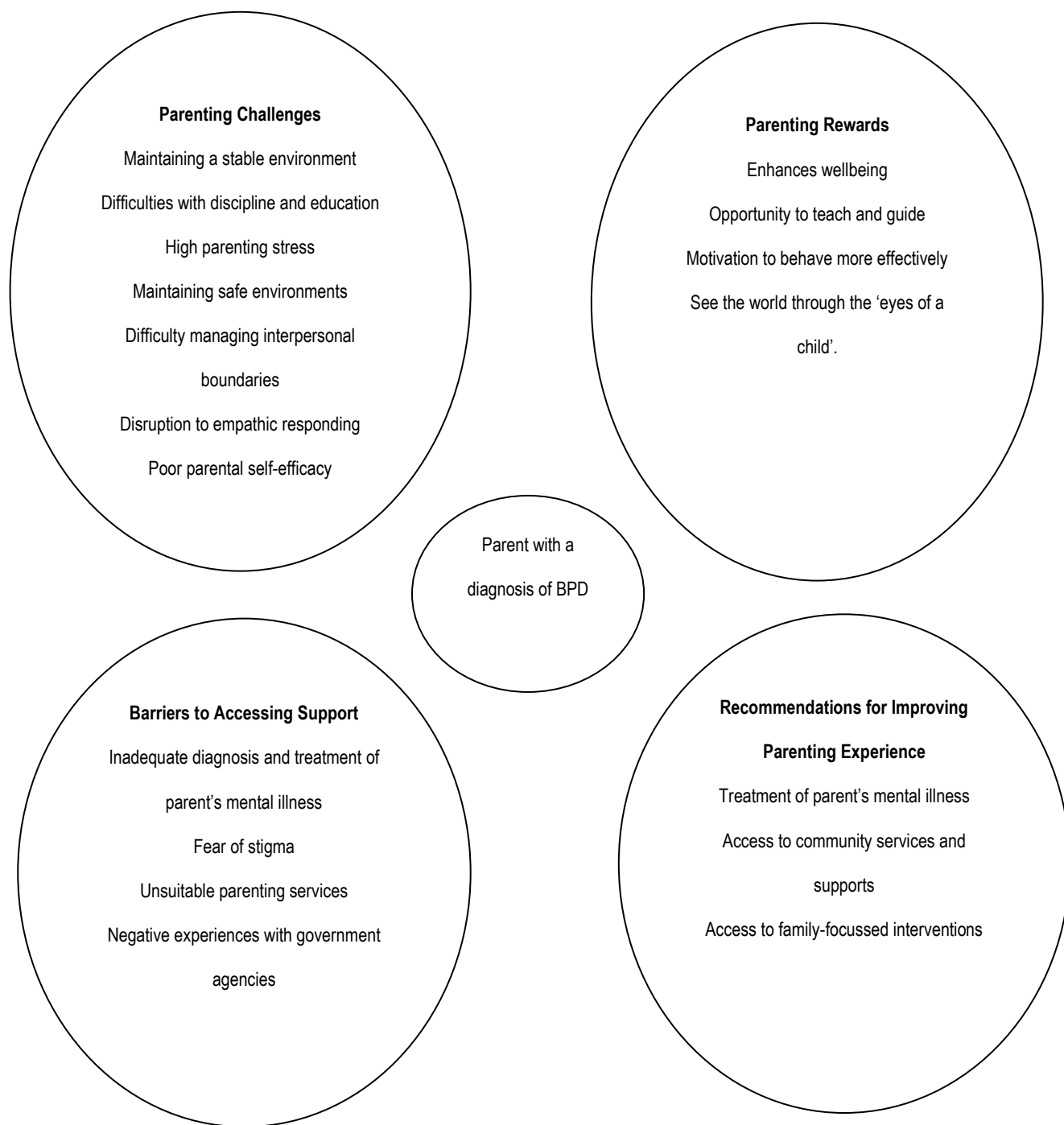


Figure 3. Experience of parents with a diagnosis of borderline personality disorder (BPD): Key themes and subthemes.

5.6.1. Parenting challenges. Parents typically reported that they experienced difficulty in maintaining a stable environment for their children. In particular, parents reported occasions in which they were physically unavailable to their children due to the symptoms of their illness (i.e., impulsive and/or destructive behaviours, psychosis, agoraphobia, social withdrawal, etc.) and/or hospitalisation. Second, conflict between the parents with a diagnosis of BPD and the other parent/carer was also reported on a number of occasions. For example, some offspring were exposed to their parents' relationship conflict, domestic violence and custody battles. Furthermore, parents reported challenges in attending to their child's basic needs (i.e., daily routines, providing a nutritious diet, budgeting, stable accommodation, household chores etc.). Maintaining routines and consistent behavioural responses towards the child was also reported as difficult, particularly in the presence of emotional dysregulation. Finally, a number of respondents indicated that they had particular difficulty in maintaining a stable social network for their children:

I had anxiety about socialising with other parents. So, my kids didn't see me standing at the side lines chatting with the other mothers. And my kids didn't really get picked off the bench during sport because their mother wasn't chatty with the coach. (Mother one)

Second, parents reported that they experienced difficulty disciplining and educating their children. This theme included parents' concerns that the symptoms of their mental illness interfered with them being able to role model healthy behaviours. For example:

You learn what you live. The child might think that mum's behaviour is normal so they start engaging in that behaviour too. That shouldn't happen. They need to have someone who explains to them that mum has an illness and that some of those behaviours aren't really appropriate behaviours. Otherwise it carries on. (Mother two).

Third, parents reported high levels of parenting stress. For example:

... the washing piling up, dishes, the fighting, sleepless nights... where you want to pull your hair out and go hide in a corner and forget about it all... that can seem like it overpowers all the good stuff. (Mother three)

Another area of difficulty for parents was maintaining safe environments for their offspring. For example, a number of parents interviewed reported that they had involvement with child welfare services at some point. In some cases, this involvement was involuntary. However, some participants stated that they had gone to these services requesting support and/or respite. Several parents reported that at least one of their children aged 18 years or younger lived with the other parent or grandparents. Some parents reported aggressive behaviour towards their children in the past, and a few parents also reported past thoughts and associated fears of harming their child. At least four of the parents reported that their offspring had witnessed them make a suicide attempt:

I wrote out big letters to everyone and locked myself away. I didn't think anyone could find me but my daughter did. My daughter has found me 11 times blue. That's why she is so possessive of me. She is worried about losing me. (Mother four)

Another notable theme was difficulties managing interpersonal boundaries. This subtheme included examples of enmeshment, intrusiveness and role reversal. In particular, there were a number of examples of parentification amongst children, such as:

I rely on the kids [aged seven and three years old] to try and calm me down. They are the parent and I'm the child. So when I get angry and I say "why haven't you told me..." and they say "mummy, I'm listening. Calm down" and then I'll calm down. (Mother five)

Another challenge for parents was disruption to parental empathy. Responses were coded according to this theme when parents made references to not being emotionally available to their offspring due to their own distress, if the parent reported difficulty attaching to their child, an inability to engage in child-centred play, parents prioritising their needs over the child's, and difficulty attending to the changing needs of child as he/she grows. For example, mother number six noted: "I was never really there for them. You have other things on your mind when you have problems [i.e., mental illness] and sometimes you don't think about your kids". Parents also reported poor parental self-efficacy, such as mother number seven who stated "I got to the point where I almost gave them up. I thought that other people could look after them better than me."

5.6.2. Parenting rewards. Participants reported a number of rewarding aspects to being a parent. In particular, parenting seemed to enhance the parent's wellbeing through increasing positive emotions (e.g., enjoyment, pride, love) and providing parents with a sense of meaning and achievement. For example, when asked what she enjoyed about parenting, mother number eight responded: "I would say nurturing. Observing my child grow through different stages and seeing her achievements. The pride of bringing such a wonderful child into the world and seeing how she has turned out".

Parents also reported that they liked being able to teach and guide their children. For example, mother number one said: "I was moulding future young adults, future husbands, future participants, consumers etc. I enjoyed educating them." Parents also highlighted how being a parent enabled them to see the world through the eyes of a child: "I always tried to consider things from the child's perspective" – mother one. Finally, parents also reported that parenting motivated them to engage in more effective behaviours:

Becoming a parent has improved my mental health a lot. It gets stressful and it really puts a strain on my abilities at times but in other ways I've watched myself change quite rapidly. It was only a few years ago that I was still cutting myself and that has stopped. I guess I've found more positive ways to deal with problems. I feel that I now have a purpose, some stability and a sense of responsibility that I didn't feel I had before. (Father one)

5.6.3. Barriers to accessing support. The most frequently reported barrier to accessing support reported by participants was inadequate treatment of their mental illness. In particular, at least 66% of participants reported that they did not have a diagnosis of BPD when they first became parents. Therefore, they were battling with an untreated illness in addition to the stressors of being a new parent.

Feeling crazy and not knowing why, or having help with it. Having self-doubt, being stressed, and not coping. I felt fearful of everything and everyone including myself. I felt anxious about everything, especially with my first three children. I had all of those feelings and I didn't know why. I was alone and I had to put up with all of that. It was challenging. (Mother three)

It was also apparent that once diagnosed, parents struggled to find appropriate treatments. This was particularly prominent for one parent who lived in a rural area. Some parents also talked about medication side effects such as over-sedation, poor memory, difficulty concentrating, poor coordination, and lack of motivation. These side effects were reported to impact on their parenting. For example:

My first experience with the medication was that I couldn't get out of bed and I couldn't drive. I had trouble doing things and my memory wasn't very good. I couldn't drive the car to take my son out to places and sometimes I would forget school activities that I was supposed to attend. I would forget to take meat out to cook tea. I just sat around. I was like a zombie. (Mother two)

Fear of stigma was also a typical response. It was apparent that parents felt stigmatised by their illness, and they noted examples of being judged by family members, services and the broader community. Fear of being judged also seemed to impact on parents' help-seeking behaviours. For example, father one noted: "I think that's one of the big barriers of why parents might not go seek help at the earliest possible point because they are worried about getting their kids taken away". Mother number three then promptly replied "You are exactly right. That is one of the many reasons that I have never sought help from most places".

Third, parents also reported that they had difficulty finding services that catered specifically to parents with a mental illness and their children. Rather, they reported that services tended to be directed at either parents or children of certain age groups.

I wanted to go somewhere with my daughter so that she could find out about my illness. I tried to take her to a non-government mental illness organisation but "No, our insurance doesn't cover minors". Then we went to a young adult service "We don't deal with parents here, we are here for young adults".

Where does a parent go with their child to talk about mental illness? (Mother nine)

Finally, some parents reported difficulties in gaining practical supports from government agencies (i.e., housing services, financial support, child support agencies, etc.).

5.6.4. Recommendations for improving parenting experience. A typical recommendation for improving the parenting experience was treatment of the parent's mental illness. In particular, a number of examples were provided on how strategies learnt from DBT had helped participants in their parenting role. For example, interpersonal effectiveness skills were quoted as important in improving parent-child communication. Second, parents reported that learning distress tolerance and emotional regulation skills were particularly helpful in reducing arguments with their children, and provided strategies to cope with stress, anxiety and frustration in more effective ways. Parents also noted that mindfulness was an effective strategy in helping them to be aware of a stressful situation and to stop and pause in the moment, before responding. Finally, a comment by mother number three demonstrated the importance of balancing validation and problem solving: "Realising that you are just human with feelings... and that you can still try to learn new ways. You will get there". Parents also reported benefits from pharmacotherapy, and there were references to the importance of increasing community awareness of issues for parents with a diagnosis of BPD. For example, mother number one recommended: "de-stigmatise. Make it like diabetes...let's get it out in the open, let's not be hush, hush about it [sic] affects..."

Second, parents recommended access to family-focused interventions such as individual counselling for both parent and child, parent skills training, parent support groups, and educating and supporting children around their parent's mental illness:

I used to wish that somebody would just come and talk to my children, and say to them, “If you think your mum is unwell, ring me” and put enough time into that relationship to build up trust. (Mother 11)

Finally, participants also recommended improved access to community agencies that could provide practical assistance such as financial support, budgeting assistance, supported employment services, housing assistance, recreational activities and child care services. Some parents also noted that in times of crisis, they would benefit from occasional assistance with day-to-day tasks such as cleaning, shopping, and cooking.

... for times when you do need that little bit of extra help... you are not coping well and domestic tasks are really hard to do... to avoid things snowballing and getting out of control or ending up in hospital. (Mother 10)

5.7 Discussion

The current investigation provides a detailed insight into the impact of BPD symptoms on a person’s parenting role. Parenting was described as both a rewarding and challenging experience. This finding is consistent with the general literature which highlights that becoming a parent entails both costs and rewards (Nomaguchi & Milkie, 2003). While the rewards associated with parenting were consistent with what would be expected from parents within the general population, what stood out most for parents with a diagnosis of BPD was they reported that their parenting role had

helped motivate them to engage in more effective coping strategies and reduced self-destructive/impulsive behaviours. This finding is similar to that reported by Nicholson, Sweeney and Geller (1998) who identified parenthood as a potentially powerful motivating force to encourage parents with a severe mental illness to actively participate in their recovery.

While parenting was noted to be rewarding, it also presented challenges. One of the main difficulties that emerged was maintaining stable environments. This is consistent with Linehan's (1993) conceptualisation of BPD as primarily a disorder of emotional dysregulation that influences the stability of behavioural responses, interpersonal relationships, thinking processes, and identity formation. It is therefore unsurprising that parents with a diagnosis of BPD reported difficulty in maintaining stable and safe environments for their children as their behavioural responses may vary according to their emotional state. Stepp, Whalen, et al. (2012a) hypothesised that parents with a diagnosis of BPD may oscillate between extreme forms of control and passivity, which could impact on the stability of a child's routine. Although parents in the present study did not necessarily report these specific behavioural extremes, they did note difficulties with behavioural management and role modelling. Parents' responses also indicated problems in empathic responsiveness particularly at times of parental emotional dysregulation. One hypothesis is that parental distress disrupts the parent's ability to notice and accurately interpret the child's cues, resulting in poorly attuned parenting responses that are either overly controlling or too permissive. This population may benefit from tailored parenting interventions that teach not only parenting skills, but also strategies for how to apply them at times of distress.

Parents with a diagnosis of BPD made a number of recommendations for improving their parenting experience. For example, they highlighted the importance of receiving appropriate treatment for their mental illness. Furthermore, they also recommended improved access to community services, parenting services, and support and resources for their children, with a particular focus on understanding their parents' mental illness. Many of these recommendations were derived from the current barriers they noted in accessing support. In particular, a number of parents reported that they did not have a clear diagnosis of BPD when they became parents. Furthermore, they also noted general challenges in accessing appropriate treatment for their mental illness and parenting, which was also reported by Dolman et al. (2013) in their review of the literature.

There were a number of limitations to the current study. First, due to resource constraints, the authors of the article were unable to check the results of the thematic analysis with the members of the focus groups. Future research may consider incorporating member-checking into the research design to clarify whether the analysis is credible from the point of view of the participants. Second, this study sourced parents with a diagnosis who were either currently or previously enrolled in a DBT skills training group. These consumers may represent a higher functioning sample of individuals with BPD, who have some insight into their mental illness and are willing to engage in treatment. A number of the participants' recommendations also made specific reference to the benefit of DBT skills. These suggestions may have been influenced by consumers' participation in the DBT programme. Further research should be attempted with parents with a diagnosis of BPD in different community and service settings. Furthermore, despite the researcher's efforts, the study was only able

to recruit one father to participate in the interviews. Research into the impact of parenting on fathers with a diagnosis of BPD is limited and warrants more attention.

Third, data were not routinely collected on comorbid conditions. A number of participants indicated that they had been given multiple past diagnoses, including mood, anxiety and psychotic disorders. BPD has been found to often co-occur with other disorders (Grant et al., 2008), and therefore high comorbidity is common among parents with a diagnosis of BPD who receive local mental health services. Furthermore, the present study also explored parenting experiences across different child developmental periods. The strength of this approach is that it represents parenting experiences over a broad age group. However, it is expected that specific challenges will be more prominent at different stages of child development.

One of the main strengths of the present study was that it recruited participants with a diagnosis of BPD who had past or present involvement with government-funded adult community mental health services, indicating a population experiencing relatively severe levels of mental illness. The qualitative nature of the interviews enabled participants to talk about their experiences in a non-judgemental space, and provided them with the opportunity to provide feedback and ideas towards future service improvement initiatives. This study is one of only a handful of published studies that have explored experiences of this specific group of service users in the mental health system, and one of the few explorations of parenting supports in the context of their diagnosis.

The current article has a number of implications for clinical practice. First, recommendations from participants highlighted the importance of early identification and treatment of the parent's symptoms of BPD. Furthermore, parents reported that once engaged with services, they would benefit from both emotional and practical

support around their parenting role. As such, it is recommended that clinicians routinely identify the parental role of consumers with a diagnosis of BPD, support parents by providing education about the potential impact of BPD on parenting, talk to the family and children about their parent's illness in age appropriate terms, and provide linkage to practical and therapeutic support where appropriate and available. Furthermore, given that parents with a diagnosis of BPD may be at risk of hospitalisation, it is important to develop child care plans with parents to ensure that preparations are made for children in times of crisis. These strategies are consistent with general guidelines for people working with parents with a mental illness (Australian Infant Child Adolescent and Family Mental Health Association & Australian Department of Health Ageing, 2004)

There are limited parenting interventions that have specifically been evaluated as effective amongst parents with a diagnosis of BPD. Participants in the present study made linkages between the skills they had learnt in DBT and how these had helped them with their parenting. Ben-Porath (2010) suggested that DBT strategies could be a useful adjunct to therapy for parents experiencing emotional dysregulation. A recent publication by Zalewski, Stepp, Whalen and Scott (2015) demonstrated that mothers with a diagnosis of BPD were supportive of proposals to integrate DBT with parenting interventions. Similar to participants in the current study, mothers with a diagnosis of BPD in the USA thought it would be helpful to be in a group with other mothers where parenting challenges could be discussed. Furthermore, the mothers in the Zalewski et al. (2015) study noted that a parenting adaptation of DBT could help improve their confidence. This is particularly important given that poor parental self-efficacy and parenting stress were common themes across both studies. The findings

of the current study support the rationale for exploring potential adaptations of DBT to address parenting challenges.

In summary, the current paper explored the experiences of parents with a diagnosis of BPD. Participants noted that parenting was both rewarding and challenging. It was apparent that there were a number of barriers to accessing parenting supports, and from this recommendations were made for improving services for parents with a diagnosis of BPD and their children.

Chapter 6: Paper Four

6.1 Preamble

Chapter six presents the final paper of the thesis which explored the relationship between borderline symptom severity, parental empathy, parenting styles and parental reports of child psychopathology. A quantitative approach to data analysis was undertaken and the variables under investigation were drawn from themes identified in papers one, two and three. For example, both paper one and three identified disruptions to empathic responding among parents with a diagnosis of BPD. Clinicians noted that parents with a diagnosis of BPD typically had difficulty understanding their child's internal states and responding appropriately. This theme was evident in parent's dialogue and coded when parents made references to not being emotionally available to their offspring due to their own distress, if the parent reported difficulty attaching to their child, an inability to engage in child-centred play, the parent prioritising their needs over the child's and difficulty attending to the changing needs of child as he/she grows. Paper four aimed to test whether poor parental empathy was associated with parental borderline symptom severity.

Both clinician and parent qualitative reports revealed parenting skills as challenging. For example, clinicians noted that parents may have difficulty utilising effective discipline and modelling appropriate behaviours. Parents with a diagnosis of BPD also noted difficulties disciplining and educating their child. The parenting literature operationalises 'parenting skills' in different ways. In the present study, we explored whether there were associations between parental borderline symptom

severity and Baumrind's (1967) parenting styles, a conceptualisation widely investigated and reported on within the parenting literature.

Finally, paper two outlined a model for the potential transgenerational transmission of emotional dysregulation from parent diagnosed with BPD to offspring. It was suggested that difficulties reading a child's emotional states could lead to invalidating responses. Paper four explores this hypothesis by testing if there are significant associations between parental borderline symptom severity, parental empathy, maladaptive parenting styles and child psychopathology using quantitative methods.

The final paper in the thesis is an unpublished manuscript which has been submitted to the Scandinavian Journal of Psychology for consideration.

**Relationships between parental borderline symptom severity, empathy,
parenting styles and child psychopathology**

- MANUSCRIPT SUBMITTED TO THE SCANDINAVIAN
JOURNAL OF PSYCHOLOGY -

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6.2 Statement of Authorship

Title of Paper	Relationships between Parental Borderline Symptom Severity, Empathy, Parenting Styles and Child Psychopathology		
Publication Status	<input type="checkbox"/> Published <input type="checkbox"/> Accepted for Publication <input checked="" type="checkbox"/> Submitted for Publication <input type="checkbox"/> Unpublished and Unsubmitted work written in manuscript style		
Publication Details	n/a		

Principal Author

Name of Principal Author (Candidate)	Dianna R. Bartsch		
Contribution to the Paper	Responsible for the development, data collection, data analysis and writing of the paper in collaboration with my supervisors. Dianna will serve as the corresponding author as the paper is submitted to journals for review.		
Overall percentage (%)	80%		
Certification:	This paper reports on original research I conducted during the period of my Higher Degree by Research candidature and is not subject to any obligations or contractual agreements with a third party that would constrain its inclusion in this thesis. I am the primary author of this paper.		
Signature		Date	10/11/19

Co-Author Contributions

By signing the Statement of Authorship, each author certifies that:

- i. the candidate's stated contribution to the publication is accurate (as detailed above);
- ii. permission is granted for the candidate to include the publication in the thesis; and
- iii. the sum of all co-author contributions is equal to 100% less the candidate's stated contribution.

Name of Co-Author	Dr Rachel M. Roberts		
Contribution to the Paper	Contributed to the conceptualisation of the research, interpretation of the results and revision of manuscripts. (10%)		
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6.3 Abstract

Children of parents diagnosed with borderline personality disorder are at greater risk of psychopathology compared to children of healthy controls or where the parent is diagnosed with another mental health condition. Parental psychopathology is likely to be related to child psychopathology through multiple pathways. The aim of the current study was to explore the relationships between parental borderline symptom severity, parental empathy, parenting style and parental reports of child psychopathology (i.e. internalising and externalising symptoms).

Sixty-four parents completed an anonymous online survey assessing borderline symptom severity, parental empathy and parenting style (i.e. authoritative, authoritarian and permissive). Parental reports of child psychopathology were obtained for 64 children aged between 4 and 17 years utilising the Strengths and Difficulties Questionnaire. Spearman's rank correlation coefficients were calculated to investigate the relationships between variables. Two three-path serial mediation models were tested to explore whether parental empathy and parenting style (e.g. authoritarian or permissive parenting) mediated the relationship between parental borderline symptom severity and child psychopathology.

Parental borderline symptom severity was negatively associated with parental empathy, and positively associated with maladaptive parenting styles. Parental borderline symptom severity was related to child psychopathology via two indirect pathways 1) authoritarian parenting style and 2) through parental empathy's relationship with authoritarian parenting.

Intervention programs may benefit from targeting parental borderline symptom severity, parental empathy and parenting styles. Future research is

recommended to evaluate whether parenting programs for parents experiencing severe borderline symptoms are effective in improving parenting and outcomes for offspring.

6.4 Introduction

Children and adolescents of parents diagnosed with borderline personality disorder (BPD) are more vulnerable to child psychopathology compared to offspring of families where a parent is diagnosed with a mood disorder, other class of personality disorder, or has no mental health diagnosis (See reviews by Eyden et al., 2016; Petfield, Startup, Droscher, & Cartwright-Hatton, 2015). Parental borderline symptoms assessed as a continuous variable have been positively associated with externalising symptoms among children and adolescents in general community samples (Bertino et al., 2012; Conway et al., 2015; Kaufman et al., 2016). Increased number of maternal borderline symptoms (e.g. symptom counts) have also been associated with greater internalising and depressive symptomology among children aged nine to fifteen years (Conway et al., 2015; Herr et al., 2008; Kaufman et al., 2016). Theorists have considered the potential for intergenerational transmission of psychosocial problems from parents with a diagnosis of BPD to their children via maladaptive parenting (Eyden et al., 2016; Petfield et al., 2015; Stepp, Whalen, et al., 2012a). While such pathways are likely to be multifaceted, the current paper explores the relationships between parental borderline symptom severity, parental empathy and parenting styles.

Deficits in parental empathy have been identified as a potential problem among parents with borderline symptoms (Bartsch, Roberts, Davies, & Proeve, 2015a; Dittrich et al., 2019). Kilpatrick (2005) defined parental empathy as a parent's ability to notice their child's signals, to make accurate attributions about the cause of the child's feelings and to experience positive child-focused emotions. Theorists have suggested that mind-mindedness (an index of mentalisation) which refers to a parent's

tendency to treat their child as an individual with a mind (Meins, 2013) is a prerequisite for empathy as a parent must appreciate that a child experiences their own thoughts and feelings in order to empathise with them (Stern, Borelli, & Smiley, 2015). The literature suggests that mothers diagnosed with BPD may experience deficits in mind-mindedness. For example, mothers with BPD were found to make fewer references to their pre-schoolers' mental states when compared to non-BPD comparisons (Schacht et al., 2013). Mothers with a diagnosis of BPD were also more likely to misread their infants mental states compared to controls (Marcoux et al., 2017). Maternal sensitivity, defined as the mothers' ability to perceive and infer the meaning behind her child's behavioural signals (Ainsworth, 1969) has also been found to be negatively associated with borderline symptoms (Howard, Beckwith, Espinosa, & Tyler, 1995) and was rated significantly lower among mothers with a diagnosis of BPD who were parenting infants, compared to healthy controls (Crandell et al., 2003; Newman et al., 2007). Similarly, mothers diagnosed with BPD were found to be more intrusively insensitive relative to comparison mothers (Hobson et al., 2005) and mothers with clinically relevant levels of borderline symptoms BPD were more insensitive towards their infants' persistent distress compared to controls (Kiel et al., 2011).

A parental diagnosis of BPD has been associated with impaired emotion recognition, with research indicating that these mothers were more likely to misidentify infants' neutral facial expressions as sad compared to controls (Elliot et al., 2014). Furthermore, negative parental emotions such as hostility, anger, dislike and rejection are likely to be inversely associated with parental empathy (Kilpatrick, 2005). Several studies have demonstrated positive associations between increased maternal borderline symptom severity and maternal hostile/reactive behaviours with

infants (Elliot et al., 2014), as well as between borderline symptom counts and maternal hostility rated by offspring (Herr et al., 2008) and researchers (Frankel-Waldheter et al., 2015) in adolescent populations. Finally, maternal borderline symptom count was positively correlated with adolescent-perceived maternal rejection (Reinelt et al., 2014).

Parents with higher levels of empathy may have a greater capacity to tune in and respond to their child's needs facilitating a more supportive parenting style (Dix, 1991). Baumrind's (1967) conceptualisation of parenting style has been widely reported in the literature. Originally, she proposed three parenting styles: authoritative, authoritarian and permissive. Authoritative parenting was described as demanding but warm and highly responsive (Robinson et al., 1995). Authoritarian parenting was also described as demanding, but it was characterised by verbal hostility, directive communication, and punitive behaviours (Robinson et al., 1995). Finally, permissive parenting was characterised as warm but non-controlling and non-demanding (Baumrind, 1967). Authoritarian and permissive parenting have been shown to be positively associated with increases in internalising and externalising behaviours among children (Olivari et al., 2013), and authoritative parenting has been found to be negatively associated with children's externalising symptoms (Olivari et al., 2013).

The relationship between parental borderline symptom severity and Baumrind's (1967) parenting styles has not been specifically explored in the literature. However, there is evidence to suggest that parental borderline personality symptoms are negatively correlated with parental warmth among mothers of pre-schoolers with behavioural problems (Harvey et al., 2011). Maternal borderline symptom count has also been found to be positively associated with guilt induction and harsh punishment among mothers of adolescent girls (Zalewski et al., 2014).

Furthermore, mothers diagnosed with BPD have also been observed to engage in a communication style that favours subservience and obedience over attempts to promote their teens' independence (Frankel-Waldheter et al., 2015). Stepp, Whalen, et al. (2012a) proposed that parents with a diagnosis of BPD may utilise under-involved parenting styles. This suggestion is supported by evidence that maternal borderline symptoms uniquely predicted self-reported laxness, when controlling for other dimensions of psychopathology (Harvey et al., 2011). In sum, parents with a diagnosis of BPD/borderline symptoms have been found to use parenting approaches that resemble authoritarian and permissive parenting.

Parental empathy is likely to facilitate sensitive parenting and be associated with more adaptive outcomes for children. For example, neuroimaging within a nonclinical sample indicated that parental empathy (evidenced through the interconnectedness of empathy-related networks in the parents' brain when offspring were infants) predicted lower internalising symptoms in children (Abraham, Raz, Zagoory-Sharon, & Feldman, 2018). Self-reported maternal empathy was also found to be inversely related to child conduct problems (Psychogiou, Daley, Thompson, & Sonuga-Barke, 2008). This study also assessed maternal reports of personal distress, which is defined as the uncomfortable feelings a parent experiences when faced with their child's suffering (Davis, 1980). Maternal reports of personal distress were positively related to maternal ratings of child hyperactive, conduct and emotional problems (Psychogiou et al., 2008).

More specifically, a recent study found that maternal BPD diagnosis also predicted lowered perspective-taking, although the general capacity to adopt another's point-of-view did not mediate the relationship between BPD and child psychopathology (Dittrich et al., 2019). Rather, personal distress mediated the

relationship between maternal BPD diagnosis and child psychopathology (Dittrich et al., 2019) suggesting that these mothers may find their children's emotions aversive and stressful which might impact on how they respond to their child, through potential withdrawal or non-comforting/aggressive reactions. However, it should be noted that the measure of personal distress and perspective-taking utilised in the Dittrich et al. (2019) study assessed trait empathy in general and was not specifically related to the child.

6.5 Aims

The current study explored the relationships between parental borderline symptom severity, parental empathy, parenting style and child psychopathology. The authors aimed to build on previous research by recruiting a population likely to experience high borderline symptomology (i.e. participants who had been given a diagnosis of BPD by a health professional). Furthermore, a continuous measure of borderline symptom severity (as opposed to borderline symptom counts) was utilised and the questionnaire assessing empathy was specifically adapted to consider attitudes towards the individual's own child/ren. Based on the literature it was hypothesised that parental borderline symptom severity would be negatively correlated with parental empathy and authoritative parenting. Conversely it was anticipated that parental borderline symptom severity would be positively associated with maladaptive parenting styles (i.e. authoritarian and permissive parenting) and child psychopathology. Finally, it was expected that the relationship between parental borderline symptoms and child psychopathology would be mediated by 1) parental empathy; and 2) parenting style.

6.6 Method

6.6.1. Procedure. This study was approved by the Human Research Ethics Committee (HREC) of the Queen Elizabeth Hospital to recruit within mental health services in South Australia. Ethical approval was also provided from the HREC at the University of Adelaide to recruit participants from online and local community groups. Recruiting parents with a diagnosis of BPD can be challenging particularly given fears of stigma and involvement from child protection services (Bartsch, Roberts, Davies, & Proeve, 2016). To increase the likelihood of participation, the authors used an anonymous online self-report questionnaire. The researcher advertised the survey broadly through several methods including: posting on online forums; on websites or in newsletters of relevant local organisations; and email invitations sent to mental health clinicians. The data custodian within mental health services disseminated recruitment letters to past participants of local Dialectical Behaviour Therapy (DBT) programs. Participants went in the draw to win a \$50 gift voucher.

One-hundred and sixty-four individuals commenced the online survey and 71 completed the survey. Seven cases were excluded from analysis during data cleaning as there were concerns about invalid patterns of responses or the parent did not have full or shared custody (i.e. minimum of fortnightly contact) of the child. The final sample comprised of 64 participants.

6.6.2. Participants. Parents were invited to participate in the study if they were aged over eighteen, had been provided with a diagnosis of BPD from a health professional and had at least one child aged between four and seventeen. The final

sample included 64 parents. In general, the sample was characterised by mothers (89%) aged between 25 and 44 (78%), who were in a relationship (52%), and were not in the workforce (56%). High school was the highest level of education for 41% of the sample. However, another 44% had completed some form of tertiary studies. Detailed parent demographics are displayed in table 8.

Table 8. Frequencies and Percentages of Parent Demographics (n=64).

Variable	N	%
<i>Age</i>		
18-24	5	8
25-34	25	39
35-44	25	39
45-54	8	13
<i>Ethnicity</i>		
Australian (Caucasian)	31	48
American (Caucasian)	18	28
African American	6	9
Other	7	11
<i>Marital Status</i>		
Single/Never Married	15	23
Defacto/Married	33	52
Separated/Divorced/Widowed	16	25
<i>Highest level of education</i>		
Did not graduate from high school	10	16
High school graduate	26	41
University/college graduate	28	44
<i>Employment status</i>		
Full time	16	25
Part time	10	16
Unemployed	7	11
Not in the workforce	30	47

Note: Due to rounding up, not all percentages add up to 100%.

Parents reported that they were aged between 14 and 41 years when their first child was born ($M = 24.81$, $SD = 6.09$). Fifty-three percent of parents reported that they had been hospitalised for psychiatric treatment at least once since the birth of their first child ($M = 4.63$, $SD = 5.43$). Most parents (77%) had received mental health treatment in the past two years and the average length of intervention was 9 months ($M=9.69$, $SD = 9.83$). Participants reported engaging in interventions such as Dialectical Behaviour Therapy (DBT) skills training group (50%), DBT individual therapy (45%), Cognitive Behaviour Therapy (CBT; 47%), supportive counselling (63%), Schema Therapy (12%), Mentalisation-based therapy (9%) and pharmacotherapy (84%).

Data were also collected for 64 offspring aged between 4 and 17 years ($M=9.89$, $SD =4.16$). Detailed demographics for children are outlined in table 9.

Table 9. Demographics of Children of Parents with Borderline Symptoms Split by Age Range (n=64).

	Variable	Age Range		Total (n=64)
		4-10 (n = 33)	11-17 (n= 31)	
<i>Gender</i>	Male	19	19	38
	Female	14	12	26
<i>Birth Order</i>	1	32	26	58
	2	1	3	4
	3	0	2	2
<i>Relationship</i>	Biological child	29	30	59
	Step child	2	1	3
	Adopted/foster child	2	0	2
<i>Child Resides</i>	Parent with BPD	18	27	45
	Shared custody	15	4	19
<i>Child Protection</i>	Yes	6	6	12
<i>Psychological Assessment/Intervention</i>	Yes	11	17	28

Note. BPD = Borderline personality disorder

6.6.3. Measures.

6.6.3.1. McLean's screening instrument for borderline personality disorder (MSI-BPD; Zanarini et al., 2003). This is a brief screening tool which is commonly used to screen for the presence of BPD. The scale asks individuals to identify whether they experience 10 symptoms in a 'yes' = 1, 'no' = 0 format. A score of seven or greater has been shown to correctly identify the presence of BPD in 81% of individuals 26 years of age and older and in 90% of individuals 25 years and younger.

The measure has good internal reliability with a Cronbach's alpha of .74 (Zanarini et al., 2003). The Cronbach alpha coefficient in the current study was .73.

6.6.3.2. Borderline symptom list – 23 (BSL-23; Bohus et al., 2009). This measure is an efficient self-rating instrument that is used to assess borderline symptom severity on a continuum. The 23 items are rated on a five-point Likert scale ranging from 'Not at all' = 0 to 'Very strong' = 4. This measure displays good psychometric properties comparable to those of the Borderline Symptom List-95 and good sensitivity to the effects of therapy (Bohus et al., 2009). The authors reported that the measure discriminated between diagnostic groups and that the mean score among respondents diagnosed with BPD was $M = 2.05$ ($SD = 0.90$). The BSL-23 has also been found to correlate robustly with BPD diagnoses achieved via semi-structured interviews (Glenn, Weinberg, & Klonsky, 2009). In the current study, the Cronbach's alpha was .96.

6.6.3.3. The Toronto empathy questionnaire (TEQ; Spreng et al., 2009). The TEQ represents empathy primarily as an emotional process or as affective insight into how another person may be feeling (Spreng et al., 2009). It is a brief self-report measure which assesses empathy as a unidimensional construct. The TEQ has demonstrated adequate reliability, validity and good internal consistency with a Cronbach's alpha of .85 (Spreng et al., 2009). In contrast to other self-report measures of empathy, the TEQ correlated positively with behavioural measures of interpersonal sensitivity (Spreng et al., 2009). The tool was recommended for use in patient populations (including personality disorders), given its brief format and ease of administration (Spreng et al., 2009).

The current study adapted the wording of the TEQ from general statements in relation to ‘other people’ to consider the statements in relation to participants own ‘child/ren’. In reviewing the reliability of the measure, it became apparent that the item ‘My children’s misfortunes do not disturb me a great deal’ was acting unusually and had a low corrected item-total correlation (i.e. less than .3). As a result, this item was removed from the scale. The final scale had 15 items that were scored on a five-point Likert rating scale ranging from ‘Never’ = 0 to ‘Always’= 4. A higher overall total score reflected greater empathy. In the current study the scale demonstrated good internal consistency (Cronbach’s alpha = .88).

6.6.3.4. Parenting styles/practices. The 62-item Parenting Practices Questionnaire was designed to assess different parenting styles and practices (Robinson et al., 1995). The present study utilized a 30-item short version of the scale to assess authoritative, authoritarian, and permissive parenting styles. Parents were asked to report their parenting behaviours and attitudes on a five-point Likert-scale with responses ranging from ‘Never’ = 1 to ‘Always’ = 5. Higher scores on each of the parenting style scales, represented greater use of parenting practices consistent with that style. The subscales have demonstrated adequate internal consistency with a Cronbach’s alpha of .91 for the Authoritative subscale, $\alpha=.86$ for the Authoritarian subscale and $\alpha=.75$ for the Permissive scale (Robinson et al., 1995). In the current study, internal consistency was examined for each subscale; Authoritative (Cronbach’s alpha = .95), Authoritarian (Cronbach’s alpha = .91), and Permissive (Cronbach’s alpha = .80).

6.6.3.5. Strengths and difficulties questionnaire (SDQ; Goodman, 1997).

This measure is a brief screening tool for children and adolescents aged between four and seventeen years. The present study utilised the parent rating form which assessed attributes over five subscales: emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behaviours. Two forms were utilised, one for children aged four to 10 years, and the other for adolescents aged 11 to 17 years. The scoring for both questionnaires was the same. However, the wording slightly differed on each depending on the age group being assessed. Items were scored on a three point Likert scale ranging from ‘Not at all’ = 0 to ‘Certainly true’ = 2 and higher scores reflected greater severity of symptoms. The internalising subscale was derived by combining the total scores of the emotional symptoms and peer relationship problems subscale (Goodman, Lamping, & Ploubidis, 2010). The externalising subscale was calculated by combining the total scores for the conduct problems and hyperactivity/inattention subscale (Goodman et al., 2010). The total SDQ scale score was calculated by adding up all of the items except for those that loaded onto the prosocial subscale (Goodman, 1997).

The SDQ was considered a valid instrument and demonstrated adequate internal consistency with a Cronbach alpha coefficient of .73 for the internalising subscale (Goodman et al., 2010), .78 for the externalising subscale (Goodman et al., 2010), and .82 for the SDQ total scale score (Goodman, 2001). In the current study internal consistency was calculated for each subscale; Internalising (Cronbach alpha = .82), Externalising (Cronbach alpha = .83) and total SDQ score (Cronbach alpha = .88).

6.6.3.6. Demographic data collection. Participants completed demographic questions to gather information about their gender, age, ethnicity, marital status, educational background, employment status, rates of psychiatric hospitalisation and mental health treatment in the past two years. De-identified information was also collected for each child such as: gender, age, relationship to the parent, who they lived with, involvement with child protective services and psychological intervention.

6.6.4. Data Analysis. Missing data were handled using person mean substitution as recommended by Hawthorne and Elliot (2005). The Shapiro-Wilks test indicated that all outcome variables (except the permissive subscale) violated the assumption of normality. As such, SPSS 24 was utilised to obtain Spearman's Rank (r_s) correlation coefficients to test the associations between variables. Second, the Mann Whitney-U test was used when comparing the difference between groups. Two sequential multiple mediation models based on traditional ordinary least-squares regression were tested. The first model examined the effect of borderline symptom severity on child psychopathology through two mediators, 1) parental empathy and 2) authoritarian parenting style. The same model was then tested but with permissive parenting replacing authoritarian style as the second mediator. Regression equations and percentile bootstrap confidence intervals were calculated using PROCESS (Hayes, 2018). This approach to testing mediational models is more powerful than traditional methods and suited to smaller sample sizes (Preacher & Hayes, 2004). Bootstrapping was based on 5.000 resamples. Mediation can be assumed if the confidence interval of the indirect effect does not include zero (Hayes & Rockwood, 2017). Hayes and Rockwood (2017) stated that the direct pathway does not need to be significant for mediation to be present.

It should be noted that the researchers considered undertaking multilevel analysis given that data were collected for multiple children per family. However, there were insufficient cases to analyse the data in this way. Instead, analyses were run with the first SDQ completed by each parent (i.e. the eldest child falling within the 4-17 age range). Sensitivity analyses were also conducted by selecting a random sample of children per family and the same pattern of results were evident.

6.7 Results

6.7.1. Preliminary analyses

Prior to testing the main hypotheses, a number of preliminary analyses were performed. It was apparent from the MSI-BPD that 80% of participants ($n=51$) met the clinical cut-off for a probable diagnosis of BPD. Participants reported an average score of $M=2.28$ ($SD=1.04$) on the BSL-23. Mean and standard deviations for the parenting variables and child psychopathology are displayed in Table 10. Inspection of SDQ total scores revealed that parents rated 47% of children and adolescents in the borderline/abnormal range. A Mann-Whitney U test revealed no significant difference in overall child psychopathology score for children ($Md=14$, $n=33$) and adolescents ($Md=12$, $n=31$); $U = 501$, $z = -0.14$, $p = 0.89$, $r = 0.02$. As such, the data were combined into one variable entitled ‘child psychopathology’. A Mann-Whitney U test revealed that children who had a history of psychological assessment and/or treatment ($n=28$) were also rated significantly higher on overall child psychopathology ($Md=20.50$, $n=28$) compared to those that did not ($Md=9$, $n=36$); $U = 213.50$, $z = -3.94$, $p < .001$, $r = 0.49$.

6.7.2. Relationships between BPD, Parenting Variables and Child

Psychopathology. Spearman's rank correlation coefficients were calculated and are displayed in Table 10. The relationships ranged from very weak to very large and were in the hypothesised directions. However, some unexpected findings emerged. For example, while there were small but significant relationships between borderline symptom severity and parental empathy, authoritarian parenting and permissive parenting; the relationships between borderline symptom severity and authoritative parenting and child psychopathology were weak and non-significant. There was a weak, non-significant relationship between parental empathy and child externalising symptoms. Finally, in addition to our hypothesised relationships, it was interesting to note a moderate, positive and significant relationship between authoritarian and permissive parenting styles.

Table 10. Spearman Rho Correlations between Parental Borderline Symptoms, Parenting Styles and Parental Reports of Child Psychopathology and Mean Scores and Standard Deviations for each of the Scales (n=64).

	1	2	3	4	5	6	7	8	<i>M (SD)</i>
1. Parental borderline symptom severity	-	-.25*	-.02	.33**	.32*	.15	.12	.17	2.28 (1.04)
2. Parental empathy		-	.61***	-.45***	-.37**	-.28*	-.17	-.24*	46.22 (9.37)
3. Authoritative parenting			-	-.31*	-.08	-.04	-.13	-.08	4.16 (0.72)
4. Authoritarian parenting				-	.56***	.42**	.42**	.47***	2.49 (0.81)
5. Permissive parenting					-	.43***	.26*	.38**	2.76 (0.94)
6. Child - internalising						-	.63***	.89***	6.33 (4.40)
7. Child - externalising							-	.90***	7.20 (4.45)
8. Child - total SDQ								-	13.53 (7.93)

Note. * $p < .05$, ** $p < .01$, *** $p < .001$; SDQ = Strengths and Difficulties Questionnaire.

6.7.3. Three -path Sequential Models. The first model (see Figure 1)

tested the following three-path sequential model: Borderline symptom severity ➡ parental empathy (mediator 1) ➡ authoritarian parenting style (mediator 2) ➡ child psychopathology (total SDQ).

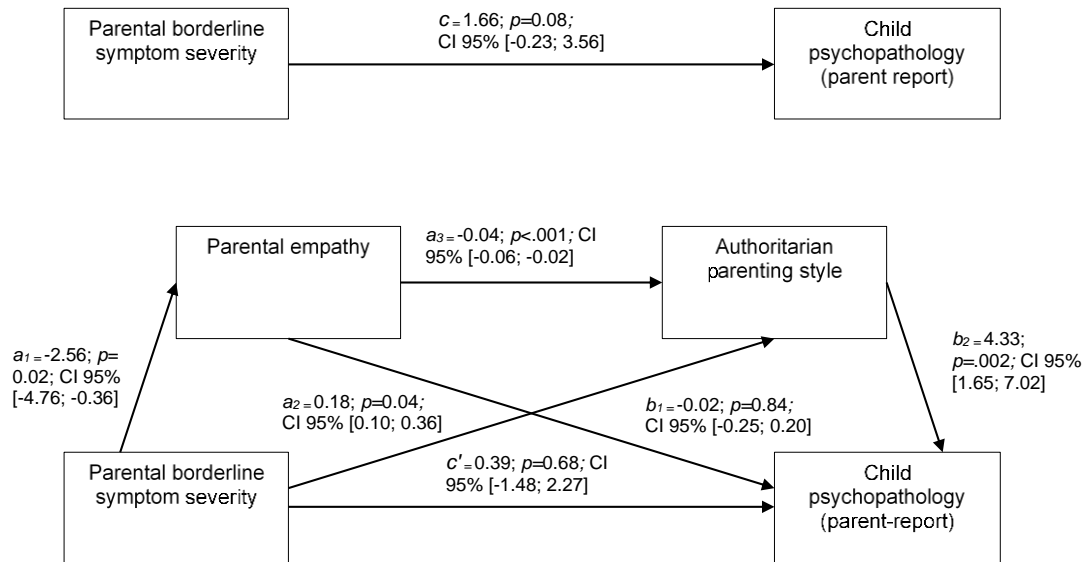


Figure 4. Unstandardized regression coefficients of a three-path sequential mediation model linking parental borderline symptom severity to child psychopathology through parental empathy and authoritarian parenting style.

Bootstrapping-based effects, standard errors (SEs) and 95% confidence intervals (CIs) for each indirect effect are presented in Table 11. The indirect effect of both mediators was significant $a_1a_3b_2 = 0.42$, 95% CI [0.03, 1.10]. Furthermore, the indirect effect: borderline symptom severity ➡ authoritarian parenting ➡ child psychopathology was also significant $a_2, b_2 = 0.79$, 95% CI [0.04, 1.58]. The contrasts between the indirect effects were not significant.

Table 11. Bootstrapping Coefficients and 95% Confidence Intervals (CIs) for Indirect Effects and Contrasts with Parental Borderline Symptom Severity as the Independent Variable, Parental Empathy and Authoritarian Parenting as Mediators, and Child Psychopathology as the Dependant Variable.

	Effect	SE	Bootstrapping 95% CI	
			Lower	Upper
a_1b_1	0.06	0.35	-0.70	0.77
a_2b_2	0.79	0.39	0.04	1.58
$a_1a_3b_2$	0.42	0.28	0.03	1.10
Total indirect effect	1.27	0.55	0.27	2.46
Contrasts				
a_1b_1 versus a_2b_2	-0.73	0.53	-1.82	0.30
a_1b_1 versus $a_1a_3b_2$	-0.36	0.50	-1.62	0.41
a_2b_2 versus $a_1a_3b_2$	0.37	0.48	-0.70	1.22

Note. SE = standard error; CI = confidence intervals

The second model replicated Figure 4 except authoritarian parenting style (mediator 2) was replaced with permissive parenting style (see Figure 5). The indirect effects were not significant (see Table 12).

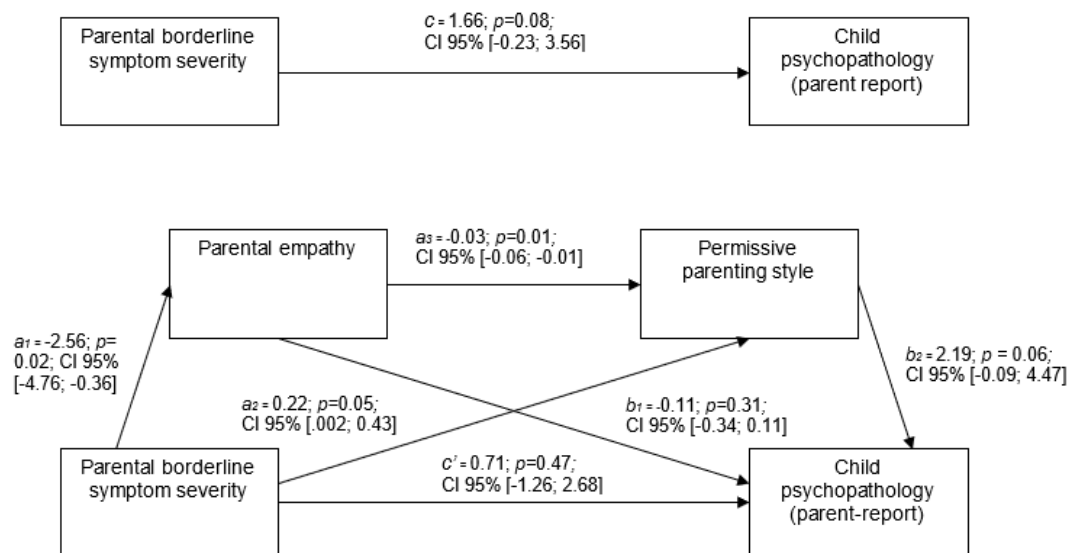


Figure 5. Unstandardized regression coefficients of a three-path sequential mediation model linking parental borderline symptom severity to child psychopathology through parental empathy and permissive parenting style.

Table 12. Bootstrapping Coefficients and 95% Confidence Intervals (CIs) for Indirect Effects and Contrasts with Parental Borderline Symptom Severity as the Independent Variable, Parental Empathy and Permissive Parenting as Mediators, and Child Psychopathology as the Dependant Variable.

	Effect	SE	Bootstrapping 95% CI	
			Lower	Upper
a_1b_1	0.29	0.35	-0.33	1.08
a_2b_2	0.47	0.37	-0.03	1.35
$a_1a_3b_2$	0.19	0.16	-0.01	0.60
Total indirect effect	0.95	0.57	0.03	2.23
Contrasts				
a_1b_1 versus a_2b_2	-0.18	0.52	-1.29	0.84
a_1b_1 versus $a_1a_3b_2$	0.11	0.38	-0.71	0.87
a_2b_2 versus $a_1a_3b_2$	0.29	0.36	-0.32	1.13

Note. SE = Standard error; CI = Confidence intervals

6.8 Discussion

The present study explored the relationships between parental reports of borderline symptom severity, parental empathy, parenting styles and child psychopathology. As predicted, greater borderline symptom severity was associated with poorer parental empathy, consistent with the literature that suggested borderline symptoms were negatively associated with maternal sensitivity (Howard et al., 1995) and that a diagnosis of BPD was associated with greater personal distress and lowered perspective-taking (Dittrich et al., 2019). Women diagnosed with BPD have been found to respond to social stressors with poorer emotional empathy compared to healthy controls (Wingenfeld et al., 2018). In response, theorists have suggested that women with BPD may react to social stressors with a ‘fight or flight’ response which may further exacerbate their interpersonal problems (Wingenfeld et al., 2018). In a parenting context, this may translate to parenting styles that are overly permissive or authoritarian in nature. Indeed, the current study demonstrated a significant negative association between parental empathy and permissive and authoritarian parenting styles.

This study also found evidence of positive associations between borderline symptom severity and maladaptive parenting styles, consistent with previous research which found positive relationships between borderline symptoms and self-reported laxness, as well as an inverse relationship with parental warmth (Harvey et al., 2011). It also aligns with findings that borderline symptom counts are positively associated with mothers’ attempts at guilt induction and harsh punishment (Zalewski et al., 2014). In sum, our findings are concordant with suggestions that borderline symptom

severity may impair the parent's capacity to infer how their children are feeling, leading to parenting which is overly controlling or lax (Bartsch et al., 2016).

Consistent with the literature, significant positive associations were found between maladaptive parenting styles (i.e. permissive and authoritarian) and parent reports of children's internalising and externalising symptoms (Olivari et al., 2013). More specifically, our findings demonstrated a significant indirect path from parental borderline symptom severity to authoritarian parenting, to child psychopathology. These results compare to a recent study which found that maternal hostility (described as signs of maternal anger, impatience and boredom) mediated the relationship between maternal borderline symptoms and number of child psychiatric diagnoses, as well as maternal ratings of child internalising and externalising symptoms (Kluczniok et al., 2018). Interestingly, Kluczniok et al. (2018) did not find a mediation effect of maternal sensitivity between maternal BPD diagnosis and child psychopathology (Kluczniok et al., 2018). The three-path sequential mediational model in the current study demonstrated an indirect path from parental borderline symptom severity, through parental empathy and authoritarian parenting, to child psychopathology. Our findings provide preliminary cross-sectional support for a more complex model which considers sequential pathways.

Poor parental empathy and parenting which is overly controlling may result in an environment which invalidates the child's emotional experience and/or fails to teach them skills to manage intense emotions. For example, theorists have suggested that transactions between emotionally sensitive individuals and invalidating environments may increase the likelihood of developing emotional dysregulation (Crowell, et al. 2009; Fruzzetti, Shenk, & Hoffman, 2005; Linehan, 1993). More specifically, invalidating environments delegitimise the child's emotional experience

and expression through four main mechanisms: communication that the child's experience is inaccurate; misattribution of the child's expressions to socially unacceptable characteristics; discouragement of the expression of negative emotion; and over-simplification of problem-solving (Musser, 2018).

Linehan (1993) described three types of invalidating family environments: first, chaotic families in which there are high levels of instability and where the environment cannot meet the child's needs; second, the 'perfect family' which places high demands on the child and does not tolerate negative emotional expression; and third, the typical family that ascribes to Western values of self-control and individuality but may be a poor fit for a child with emotional and behavioural vulnerabilities. Of these types of invalidating families, the 'perfect family' has been likened to authoritarian parenting (Musser, 2018). In particular, authoritarian parents may enforce their high standards through over-involvement and by discouraging expressions of negative emotions through withdrawing warmth or strict discipline (Musser, 2018). Thus, the pattern of results in the current study could lend support to the theoretical impact of invalidating environments in the development of BPD.

The cross-sectional design of the current study does not allow for the testing of temporal mediation and limits the capacity to infer causation. However, this pattern of results is analogous with longitudinal research which found that maternal borderline symptom counts assessed during pregnancy contributed to the prediction of mothers' reports of their child's internalising, externalising and total symptoms at two and a half years of age (Huntley et al., 2017). Furthermore, another study found that maladaptive parenting (i.e. an over-protective and rejecting parenting style and high discrepancy between parent and child self-report of internalising symptoms) mediated the transmission of borderline symptoms from mother to child (Reinelt et al., 2014).

While the aetiological pathways for the development of BPD are likely to be multifaceted and comprised of both biological and environmental influences, our findings are consistent with extant research which indicates that maladaptive parenting may represent one pathway for the potential transgenerational transmission of psychopathology.

A strength of the current study was that the average borderline symptom severity among participants was high and comparable to the mean score among BPD diagnostic groups on the BSL-23 (Bohus et al., 2009). Furthermore, 80% of the sample met the clinical cut-off score on a widely used screening tool for BPD. The demographic sample of the participants revealed that many of the parents had faced psychosocial challenges including single parenthood and unemployment. The majority had received mental health treatment in the past two years and just over half of parents experienced periods of hospitalisation since the birth of their child. This sample differed from previous research which explored borderline personality patterns/symptom counts amongst the general population and where the severity of borderline symptoms was likely to be low (Bertino et al., 2012; Conway et al., 2015; Kaufman et al., 2016). The recruitment approach of the current study increased the ecological validity of the findings. However, the smaller sample size limited the power of the analyses, which may explain why some findings did not reach significance. Furthermore, while the current study aimed to recruit both mothers and fathers who met diagnostic criteria for BPD, the number of fathers who participated remained small. Given the potential for gender-differences in parenting responses, it is recommended that future research explore parenting attitudes and behaviours in relation to borderline symptom severity among fathers.

The current study was limited in that it relied upon parental reports of child psychopathology as observations of parent-child interactions and use of multiple informants was not feasible. While the authors acknowledge the potential for biases in parental self-reports in the context of parental mental illness (Kroes, Veerman, & De Bruyn, 2003) there is also support for the validity of child ratings made by mothers diagnosed with BPD (Mena et al., 2016). Parental reports of child psychopathology in the current study were also consistent with research that has identified higher rates of externalising and internalising disorders among children of parents with a diagnosis of BPD compared to controls (Barnow et al., 2006; Weiss et al., 1996). Furthermore, parent ratings of child psychopathology in the current study were consistent with the children's history of psychological interventions, with significantly higher ratings of psychopathology among children who had undergone psychological assessment or therapy. Nevertheless, it is recommended that future research aim to replicate these findings utilising structured interview methods, observational measures, and multiple informants for child psychopathology.

The current study also used an abbreviated parenting style measure which did not provide sufficient scope to assess a fourth style that has been highlighted in the literature, namely uninvolved parenting. This parenting style has been likened to chaotic families which may invalidate their offspring through indifference, neglect or under-involvement (Musser, 2018). Future research may benefit from exploring associations between borderline symptom severity and uninvolved parenting. It should also be noted that a number of theorists have suggested that parenting dysfunction for parents with a diagnosis of BPD may be characterised by an oscillation between over- and under-involved parenting styles (Reinelt et al., 2014; Stepp, Whalen, et al., 2012a). The parenting measure utilised in the present study was

not designed to assess the consistency of parenting responses, although we did observe a strong positive association between authoritarian and permissive parenting. This was unanticipated, given that Baumrind's theory (1967) would suggest that these parenting styles sit at opposite ends of the warmth and demandingness continuums and an inverse relationship between authoritarian and permissive parenting was expected. However, it is consistent with observations that parents of suicidal adolescents oscillate between excessive leniency and authoritarian control (Rathus & Miller, 2000). Future research may benefit from exploring the role of inconsistent parenting among parents with greater borderline symptom severity and the potential of this as a target of intervention. Finally, the broader literature recommends a move towards assessing dimensions of parenting (e.g. psychological and behavioural control) and domain-specific models in which parents flexibly use parenting strategies in different situations (Smetana, 2017). These assessment approaches may be considered in future research studies.

The authors also acknowledge that parental perceptions of child psychopathology may also impact on parenting behaviours and symptomology in the opposite direction. Certainly, it may be that if a child has a difficult temperament, this could impact the on the parent's empathy and parenting style. For example, a recent longitudinal study among Dutch adolescents and their parents found that adolescent externalising symptoms had an indirect effect on maternal empathy via parent-child relationship quality (Crocetti et al., 2016). However, there is also evidence to suggest that parental borderline symptoms drive maladaptive mother-daughter interactions. For example, Zalewski et al. (2014) found that the impact of maternal borderline symptoms on parenting was not exacerbated by adolescent daughters' low self-control and negative emotionality. It is recommended that the findings of the current study are

replicated utilising a longitudinal design. Finally, despite limitations of the online survey design, this method afforded participants with anonymity, which may have increased their honesty in responding. This method may have also enabled participation from those who would not normally engage in research conducted in laboratory or clinical settings.

A diagnosis of BPD does not necessarily equate to high-risk parenting (NHMRC, 2012). However, our findings suggest that parents may require additional support if borderline symptoms are severe. Clinicians may consider targeting parent's borderline symptomology, parental empathy and parenting styles when designing interventions for this population. As noted earlier, mentalisation has been hypothesised as a building block for empathetic responding (Stern et al., 2015). A mentalisation-based treatment program for parents has been proposed for parents with BPD (Nijssens et al., 2013) with the aim of improving parental reflective functioning (i.e. the ability to envision the child in terms of internal mental states; Slade, 2005) and thus the parent-child relationship. A recent pilot study of a 20-week mentalisation-based group program for high-risk parents was deemed acceptable by participants and was associated with improved parental self-efficacy (Byrne et al., 2019). However, there is no published data evaluating the effectiveness of such an approach with parents with borderline symptoms at the present time.

Therapeutic strategies that specifically target parental empathy are likely to be important. Block-Lerner, Adair, Plumb, Rhatigan and Orsillo (2007) proposed that mindfulness and experiential acceptance-based approaches may be beneficial to cultivating empathetic responding. There have been a number of proposals to adapt DBT (in which mindfulness and acceptance strategies are core skills) to address parenting challenges (Bartsch et al., 2015a, 2016; Ben-Porath, 2010; Stepp, Whalen,

et al., 2012a; Zalewski et al., 2015). A recent pilot study evaluated an adapted version of DBT targeting mother-infant dyads where mothers reported borderline symptoms (Sved Williams, et al. 2018). The outcomes indicated that the intervention was associated with improved maternal mentalisation and mental health. However, further research is required to evaluate the impact of such programs on mother-infant dynamics in comparison to controls. Furthermore, the potential for adapting therapies such as DBT to target parenting with children in early and middle childhood has yet to be explored. Further research is required to evaluate the effectiveness of such approaches.

In summary, the current study lends support to hypotheses that parental borderline symptom severity is inversely associated with parental empathy. Furthermore, parental empathy was negatively related to maladaptive parenting styles. While the current study cannot make assumptions about causality, there were significant associations between maladaptive parenting styles and parental reports of child psychopathology. These findings support recommendations to develop and evaluate parenting interventions that are targeted at parents experiencing borderline symptoms.

Chapter 7: Discussion

7.1 Overview

The aim of the current thesis was to increase understanding of what it is like to parent with a diagnosis of BPD and possible outcomes for offspring. This project also intended to identify targets for intervention. A mixed methods approach was utilised and included qualitative analysis of both clinician and parent viewpoints. Some of the hypotheses generated from the qualitative findings were further tested utilising quantitative research methods. Specifically, the model hypothesised in paper two suggested that parental invalidation may mediate the relationship between parental borderline symptoms and child psychopathology. The final paper explored the relationships between parental borderline symptom severity and perceived child psychopathology, considering deficits in parental empathy and maladaptive parenting styles as potential mediators given that these factors may theoretically contribute to an invalidating environment. The final chapter of the thesis reviews the outcomes for each study, examines the theoretical and clinical practice implications of these findings, considers the strength and limitations of the dissertation and presents recommendations for future research.

7.2 Review of Thesis Findings

7.2.1. Paper one: Borderline personality disorder and parenting:

Clinician perspectives. Paper one sought clinician opinions regarding observed parenting challenges among parents with a diagnosis of BPD. A diverse group of clinicians (n= 106) provided responses which were coded utilising thematic analysis. Five main themes emerged; disruption to empathic responsiveness, difficulties maintaining stable and/or safe environments, difficulty managing interpersonal boundaries, parenting skill deficits and poor parenting self-efficacy.

Since this paper was published in 2015, further evidence has emerged supporting these themes. Research has indicated that mothers with a diagnosis of BPD may have difficulty reading their child's internal states as highlighted under the theme 'empathic responsiveness'. For example, mothers with a diagnosis of BPD were found to be more likely to misread their infant's cues compared to controls (Marcoux et al., 2017). Parental borderline symptoms were also related to increased use of non-supportive responses (i.e. distress, punishment or minimisation) in response to the child's expressions of negative emotion (Breux et al., 2016; Kiel et al., 2017). Furthermore, the relationship between maternal borderline symptoms and non-supportive responses to child negative affect was mediated by maternal emotional dysregulation (Kiel et al., 2017). Interestingly, clinicians specifically cited the theme 'empathic responsiveness' in relation to parents' symptoms of emotional dysregulation (Paper 1; Bartsch et al., 2015a).

In line with clinician observations regarding parents' ability to maintain safe environments, further research has emerged demonstrating that BPD/elevated borderline symptoms are associated with child abuse potential (Dittrich et al., 2018;

Hiraoka et al., 2016) and child protection involvement (Blankley et al., 2015; Laporte, Paris, & Zelkowitz, 2018; Laulik et al., 2016). These findings support the need for clinicians to assess risks and ensure that safety is addressed. Parents with a diagnosis of BPD who have child protection involvement may also benefit from targeted interventions.

Evidence has also emerged indicating that mothers with a diagnosis of BPD may have difficulty managing interpersonal boundaries. For example, mothers with a diagnosis of BPD were found to endorse lower autonomy support of their children (aged 4-7 years) and higher levels of parent-child role reversal compared to healthy controls (Macfie et al., 2017). Mothers also demonstrated a tendency to inhibit their adolescent's autonomy (Frankel-Waldheter et al., 2015).

Finally, there is further evidence in the literature that parents with a diagnosis of BPD experience deficits in parenting skills. For example, mothers diagnosed with BPD were more likely to utilise psychological control with their adolescents compared to healthy controls (Mahan et al., 2018). Maternal borderline symptoms were also associated with greater hostility towards children in parent-child observations across developmental periods (Frankel-Waldheter et al., 2015; Høivik et al., 2018; Kluczniok et al., 2018; Macfie et al., 2017).

In the present study, clinicians noted that parents with a diagnosis of BPD had the capacity for adaptive functioning and that they may be motivated to learn strategies to improve parenting. This theme has been identified less frequently in the literature with the focus generally being on parenting deficits. Acknowledgement of the capacity for adaptive parenting in this population is important given suggestions that social workers may place children of parents diagnosed with BPD in care more quickly, due to a pessimistic view of their parenting capacity (Laporte et al., 2018).

Further research is required to explore factors that predict adaptive parenting in this population as these variables could inform intervention-planning.

The first paper in the thesis also summarised clinician views of the effectiveness of available parenting resources, supports and interventions for parents with a diagnosis of BPD and their children. Although at the time there were few published accounts of interventions for parents with a diagnosis of BPD and their families, clinicians had observed some effective approaches occurring in clinical practice. In particular, clinicians' recommendations trended towards an integration of approaches, which addressed the parent's symptoms of emotional dysregulation as well as targeting parenting. Recommendations were also made regarding content to inform the development of parenting interventions (see section on clinical implications for elaboration).

7.2.2. Paper two: The impact of parental diagnosis of borderline personality disorder on offspring: Learning from clinical practice. The second paper was drawn from data collected in the first study, namely clinicians' observations of the potential impact of a parental diagnosis of BPD on offspring. Clinicians were also asked to comment on potential protective factors. Responses were received from 64 clinicians and thematic analysis revealed five main themes about the potential impact of a parental diagnosis of BPD on offspring. These related to behavioural, emotional and interpersonal difficulties as well as disturbances to cognitive processes and self-dysfunction.

Eyden et al.'s (2016) systematic review of the literature demonstrated associations between maternal BPD/borderline symptoms and offspring emotional dysregulation, internalising and externalising symptoms, and interpersonal

problems (including insecure attachment) across developmental periods. Furthermore, since the Eyden et al. (2016) review, additional studies have demonstrated support for these themes. For example, Zalewski et al. (2019) found that maternal borderline symptoms were associated with poorer executive functioning and affective perspective taking among pre-schoolers (3-4 years old). Kerr, Dalrymple, Chelminski, & Zimmerman et al. (2018) demonstrated that among parents with a diagnosis of MDD, borderline symptoms were linked to greater risk of MDD and SUDs among offspring (aged 7 to 31 years). In particular, parental borderline symptoms of anger and impulsivity were associated with risk for MDD and the symptom of emptiness was associated with risk of SUDs. Finally, a recent study demonstrated that offspring (aged 15 to 25) where at least one parent had a diagnosis of BPD were at elevated risk of developing ADHD, anxiety, mood, and SUDs compared to offspring of healthy controls (Küng et al., 2019). Furthermore, children of parents diagnosed with BPD were more likely to report five or more symptoms of BPD, consistent with the disorder's diagnostic cut-off (Küng et al., 2019). These findings lend support to the adaptation of a model which explains the development of BPD in individuals, to conceptualise the potential transgenerational transmission of difficulties from parent to child.

The second paper in this thesis proposed a transactional model for the potential transgenerational transmission of BPD (See chapter 4; Figure 2) from parent to child based on Linehan's (1993) original biosocial model outlined in her seminal text. An updated version of the newly termed biosocial developmental model of BPD, was published in the second edition of the DBT training manual (Linehan, 2015) and incorporated evidence that had accumulated since the original manual was published. For example, biological factors were specified

based on evidence that has emerged regarding the role of genetics and brain development (see Introduction section entitled Aetiology).

The theory was also extended to propose that biological vulnerabilities interact with high-risk transactions between the child and caregiver (previously termed invalidating environments). The child's contribution includes temperamental characteristics such as negative affectivity, impulsivity and high emotional sensitivity (Crowell et al., 2009). Furthermore, the concept of the caregiver contribution was revised to include invalidation of the child's emotions as well as inadequate coaching of emotion, an interaction style that reinforces emotional arousal in the child and ineffective parenting due to poor fit (e.g. the demands and expectations of the parent are mismatched to the child's temperament or abilities) and/or insufficient family resources (e.g., time, money and social supports) (Crowell et al., 2009; Linehan, 2015). It was theorised that the high-risk transaction between child and caregiver was an escalating process which intensified into extreme emotional displays and reinforcement of emotional lability (Crowell et al., 2009; Linehan, 2015). It was also hypothesised that these high-risk interactions may lead to emotional dysregulation in the child and increase the risk of experiencing negative outcomes in social, cognitive, emotional and behavioural domains. If this pattern of maladaptive behaviours became pervasive, it could lead to a diagnosis of BPD.

The extension of Linehan's conceptualisation complements the model proposed in chapter 4 (Paper Two; Bartsch et al., 2015b). The elaboration of the caregiver contribution to include both invalidation of the child's emotions and ineffective parenting is consistent with the findings of paper 4 in this thesis in which poor parental empathy and maladaptive parenting were associated with

increased psychopathology among offspring. Consistent with the model proposed (Paper Two; Bartsch et al., 2015b) other cross-sectional studies have found that parenting variables such as frightened/disoriented interactions (Lyons-Ruth et al., 2019), maternal hostility (Kluczniok et al., 2018), and maternal personal distress (Dittrich et al., 2019) mediated the relationship between maternal borderline symptoms and maladaptive child outcomes. Prospective research also supports the theory that maladaptive mother-child interactions (characterised by insensitive parenting and discrepancies between mother-child reports of internalising symptoms) mediate the transmission of borderline features from mother to child (Reinelt et al., 2014). Supplemental data from the Reinelt et al. (2014) study also demonstrated the relevance of this model to specific adolescent outcomes such as impulsiveness, self-esteem and difficulties identifying and describing feelings.

An area that could be further elaborated upon in the model proposed in paper 2 (see Figure 2) is the contribution of child temperament. Initially this was conceptualised as sitting under the broad heading of biological vulnerabilities. The updated biosocial development model has delineated this factor more specifically under the ‘high risk transaction’ (Crowell et al., 2009; Linehan, 2015). This may be in response to arguments that temperamental characteristics develop through complex interactions between biological and environmental factors (Depue & Fu, 2012). Consistent with the biosocial development theory (Crowell et al., 2009; Linehan, 2015) children of mothers with a diagnosis of BPD demonstrated higher negative affectivity and lower effortful control compared to controls (Mena et al., 2016). Furthermore, negative emotional reactivity assessed among at-risk 16-year-old girls, interacted with family adversity to predict the development of BPD symptoms at 18 years of age (Stepp, Scott, et al., 2016).

Given the bi-directional nature of parenting, it is possible that youth temperament may interact with maternal borderline symptoms to predict parenting (e.g. the child's difficult temperament may exacerbate the parent's borderline symptoms and contribute to poorer parenting practices). However, this hypothesis was not supported in the Stepp, Whalen et al. (2014) study. Rather, maternal emotional dysregulation was the best predictor of parenting behaviour (Stepp, Whalen, et al., 2014).

Consistent with the model proposed in chapter 4 (Figure 2) evidence has emerged demonstrating that the relationship between parental personality disorder symptoms (a composite score of borderline and antisocial symptoms) and youth psychopathology (internalising, externalising, and total psychopathology) assessed one year later, was partially mediated by child emotional dysregulation (Kaufman et al., 2016). Given this finding, it could be argued that treatments targeting parental emotional dysregulation may also relevantly target offspring.

The model proposed in paper 2 (Bartsch et al., 2015b) also outlined protective factors based on clinician reports which included social support/healthy role models, child and/or parent characteristics, therapeutic intervention, socioeconomic factors and child protection intervention. The consideration of protective factors is consistent with the differential susceptibility hypothesis which has shown that while children with temperamental vulnerability may be at risk in an adverse environment, the same child may do better than non-vulnerable children in a supportive context (Belsky, Bakermans-Kranenburg, & van Ijzendoorn, 2007). If this is the case, the identification of specific protective factors could inform the development of intervention programmes.

In the final paper of the thesis, 53% of parents reported that their child was functioning in the normal range on the Strengths and Difficulties Questionnaire. Nevertheless, there is limited consideration in the literature of the impact of protective factors on children of parents with a diagnosis of BPD. A paper by Glickauf-Hughes (1998) reflected on common themes identified among nine adult patients who did not meet the criteria for BPD but who were presumed to have been raised by mothers high in borderline symptoms. The author noted that these patients seemed to have adaptive features such as self-understanding, identifying negatively with their mothers and choosing to behave differently, the ability to form positive relationships with others, to identify alternate role models, and constructive use of fantasy. However, the findings were limited as the mother's diagnosis was not confirmed and because of the small sample size.

Recent research indicates that positive childhood experiences (e.g. being able to talk to family about feelings, family support, sense of belonging in high school, connection to community, supportive friends, at least two non-parent supports, and feeling safe/protected at home) may offset the impact of adverse childhood events on adult emotional and interpersonal problems (Bethell, Jones, Gombojav, Linkenbach, & Sege, 2019). Further exploration of protective factors and positive childhood experiences for children of parents with a diagnosis of BPD is warranted.

7.2.3. Paper three: Understanding the experience of parents with a diagnosis of borderline personality disorder. The third paper conducted an in-depth exploration of what it is like to be a parent diagnosed with BPD and the accessibility of supports. Twelve parents were recruited from a community mental health service DBT skills training group programme and were asked to participate in focus group discussions or interviews. Participants were asked questions about their parenting experience, the impact of their symptoms on parenting, the impact of parenting on their mental health, access to and availability of parenting resources in the local area. Thematic analysis revealed four key themes and 17 subthemes (see Figure 3). The first key theme was parenting challenges which included subthemes such as maintaining a stable environment, difficulties with discipline and education, high parenting stress, maintaining safe environments, difficulty managing interpersonal boundaries, disruption to empathic responding and poor parental self-efficacy.

There was considerable overlap with the themes identified by clinicians (Paper 1; Bartsch et al., 2015a). An additional theme emerged, namely high parenting stress. This finding is consistent with recent literature in which mothers with a diagnosis of BPD reported greater parenting stress than non-clinical comparisons (Ramsauer et al., 2016; Renneberg & Rosenbach, 2016). Parenting stress was also identified as a theme in another qualitative study of mothers with a diagnosis of BPD (Zalewski et al., 2015). These authors also noted that parenting stress could worsen the parent's symptoms of BPD, emphasising the transactional nature of relationships between parental mental health, parenting and offspring outcomes (Zalewski et al., 2015).

The second key theme identified in paper 3 (Bartsch et al., 2016) was parenting rewards, which comprised subthemes including: enhances wellbeing; opportunity to teach and guide; motivation to behave more effectively; and ‘see the world through the “eyes of a child”’. These rewards are common to parents without a mental illness. However, the motivation to engage in more effective coping (and less self-destructive behaviour) indicates that parenting may provide impetus to actively engage in the recovery process (Nicholson et al., 1998). This theme was also evident among responses of fathers with a diagnosis of BPD in a recent qualitative study (Lumsden, Kerr, & Feigenbaum, 2018). Emerging research suggests that incorporating parenting in recovery-orientated approaches (e.g., where recovery may be conceptualised as connectedness, hope, identity, meaning and empowerment) may assist in improving parent, child and family well-being (Reupert, Price-Robertson, & Maybery, 2017). As such, parenting interventions for parents with a diagnosis of BPD may be a useful adjunct to treatment within adult mental health settings.

The third key theme identified barriers to accessing parenting support. Examples included inadequate diagnosis and treatment of parents’ mental illness, fear of stigma, unsuitable parenting services and negative experiences with government agencies. In the present study, over half of the respondents advised that they did not have a diagnosis of BPD when they first became parents. This is consistent with another study which found that the difference between perceived age of onset of BPD and actual diagnosis was fifteen years (Ng, Townsend, Miller, Jewell, & Grenyer, 2019). This is a concern given that recognisable features of BPD may appear during adolescence (Stepp, 2012). A recent review suggested that clinicians were less likely to advise consumers of their diagnosis or provide psychoeducation, when considering

personality disorders (Perkins et al., 2018). Ring and Lawn (2019) noted that the development and perpetuation of stigma towards people with BPD at the interface of care with mental health professionals stalled effective engagement and treatment. Sadly, parent reports in the third study highlighted that a lack of timely, accurate diagnosis and early intervention had an ongoing impact on the individual's functioning including their parenthood journey.

Stigma was also a barrier to engaging parenting supports. Parents feared being judged and having their child removed from their care. This theme was also noted in another study when mothers were asked their views on participating in an adapted version of DBT for parents and children (Zalewski et al., 2015) and a recent qualitative study with fathers with a diagnosis of BPD (Lumsden et al., 2018). Fear of stigma may be associated with shame and may make it particularly difficult for parents with a diagnosis of BPD to engage in standard parenting interventions (Phelan et al., 2006). Targeting interventions specifically to this population may increase parent's willingness to engage. Certainly, parents have reported that it is helpful to be in a parenting group with other parents who are diagnosed with a mental illness (Coates, Phelan, Heap, & Howe, 2017).

The final key theme in the study was recommendations for improving parenting experience. Participants noted the importance of being able to access treatment for their own mental health but also wanted access to family-focused interventions. Specific reference was made to children receiving support around their parent's mental illness and having someone to contact if the parent was becoming unwell. Consistent with recommendations from clinicians (Paper 1; Bartsch et al., 2015a) parents reported that they would like to be supported as a

family unit. Parents also recommended improved access to various community agencies that could assist with practical support.

In sum, the third paper in the series provided a novel contribution to the literature as there are only a few qualitative investigations of the impact of a diagnosis of BPD on parenting. In general, the investigation supported the need for improved access to interventions for families where a parent is diagnosed with BPD.

7.2.4. Paper four: Relationships between parental borderline symptom severity, empathy, parenting styles and child psychopathology. The final paper of the thesis utilised quantitative research methods to explore the hypothesised relationships between parental borderline symptom severity, parental empathy, parenting styles, and child psychopathology. Sixty-four parents completed an anonymous online survey assessing borderline symptom severity, parental empathy and parenting style (i.e. authoritative, authoritarian and permissive). Parental reports of child psychopathology (assessed using the Strengths and Difficulties Questionnaire) were also obtained for one child per family, aged between 4 and 17 years. Spearman's rank correlation coefficients were calculated to investigate the relationships between variables. Two three-path serial mediation models were tested to explore whether parental empathy and parenting style (e.g. authoritarian or permissive parenting) mediated the relationship between parental borderline symptom severity and child psychopathology.

As hypothesised, parental borderline symptom severity was negatively associated with parental empathy and positively associated with maladaptive parenting styles. Parental borderline symptom severity was related to child

psychopathology through authoritarian parenting style, and through lack of parental empathy with authoritarian parenting. These results converged with the findings from the previous papers in this thesis. For example, paper four provided quantitative evidence of a negative association between parental borderline symptom severity and parental empathy. This is consistent with both clinician (Paper 1; Bartsch et al., 2015a) and parent (Paper 3; Bartsch et al., 2016) reports that empathic responding was disrupted when a parent had a diagnosis of BPD.

Second, parental borderline symptoms were significantly and positively associated with authoritarian and permissive parenting styles which have been reported as maladaptive within the literature. This finding is consistent with both clinician (Paper 1; Bartsch et al., 2015a) and parent (Paper 3; Bartsch et al., 2016) reports that disciplining children is difficult for parents with a diagnosis of BPD. Discipline utilising an authoritarian parenting style may be perceived as harsh while permissive parenting is associated with a lax approach. Interestingly, this study found a strong positive association between authoritarian and permissive parenting. This was unanticipated, given that Baumrind's theory (1967) suggests that these parenting styles sit at opposite ends of the warmth and demandingness continua and an inverse relationship was expected. However, the finding is consistent with observations that parents of suicidal adolescents vacillate between excessive leniency and authoritarian control (Rathus & Miller, 2000).

As described by Rathus and Miller (2000), parents (and even therapists) may engage in subjugation and a laissez-faire approach in response to an adolescent's emotional dysregulation and suicidality. If the adolescent engages in maladaptive behaviour resulting in negative consequences during this period, the parents (and other authority figures) may flip into the other extreme of excessive authoritarian

control. A similar pattern of responding could occur among parents with a diagnosis of BPD given the tendency to oscillate between behavioural extremes. This risk is further exacerbated given that offspring of parents with BPD may also experience emotional dysregulation and suicidality. Rathus and Miller (2000) highlighted excessive leniency vs authoritarian control as a dialectical dilemma to be addressed in treatment when working with suicidal adolescents and their families. This may also be an important treatment target when working with parents with a diagnosis of BPD.

The model tested in this final paper demonstrated that parental borderline symptoms were associated with authoritarian parenting both directly and indirectly via the association with parental empathy. This finding is concordant with paper three of the thesis (Bartsch et al., 2016) which hypothesised that borderline symptom severity may impair the parent's capacity to infer how their child is feeling and that their parenting may become overly controlling as a result. A model including parental empathy and permissive parenting as mediators between borderline symptom severity and child psychopathology was tested but the indirect effects were not significant.

Overall, this final study demonstrated that parental borderline symptoms were associated with offspring symptomology indirectly through parental empathy and authoritarian parenting. The model tested provided preliminary support for the transgenerational transmission of emotional dysregulation from a parent diagnosed with BPD to child as outlined in Paper 2 (Bartsch et al., 2015b). For example, this model proposed that invalidating environments may mediate the association between parental diagnosis of BPD and psychopathology among offspring. Poor parental empathy and parenting which is overly controlling may result in an environment which invalidates the child's emotional experience. Authoritarian families have been likened to the 'perfect family' in which parents enforce high standards through over-

involvement and by discouraging expressions of negative emotions through withdrawing warmth or strict discipline (Musser, 2018). Thus, the pattern of results in the current study could lend support to the theoretical impact of invalidating environments in the development of BPD.

It should be noted that the present study was unable to infer causation due to its' cross-sectional design. However, the findings are consistent with a longitudinal study which found maladaptive mother-child interactions mediated the relationship between maternal borderline symptoms and offspring outcome (Reinelt et al., 2014). These findings support the rationale for including parenting skills as a target for intervention with people who have a diagnosis of BPD.

7.3 Clinical Implications

The findings of this thesis converge with the literature that suggests children of parents with a diagnosis of BPD are at greater risk of psychosocial adversity and the development of psychopathology. The papers within this thesis support the rationale for the development of targeted interventions. For example, parents with a diagnosis of BPD who attended local mental health services noted difficulty finding interventions that were tailored to them and their children (Paper 3; Bartsch et al., 2016). They also advocated for clinicians to play a role in educating their children about their mental illness, to involve their children in crisis planning, and access to family-focused interventions. Furthermore, parents noted that fear of stigma was a barrier to engaging with standard parenting interventions. Clinicians identified several approaches which they felt would usefully inform the development of targeted interventions for parents with a diagnosis of BPD (Paper 1; Bartsch et al., 2015a). The

final paper in this thesis identified some specific treatment targets, namely parental borderline symptom severity, parental empathy and parenting styles.

Overall, the themes that emerged from the papers in this thesis identified a number of parenting challenges that could be addressed through the development of targeted interventions. These interventions should address parental borderline symptoms, parental empathy, maintaining safe and stable environments, parenting skills (particularly relating to discipline that may be considered overly strict or lax), managing interpersonal boundaries, poor parental self-efficacy, and high parenting stress. Clinicians also recommended a number of specific psychological strategies and areas of skills development to be included in parenting interventions for this population, including: psychoeducation (about child development and the impact of parental BPD on parenting), parental empathy, emotional regulation, mindfulness and acceptance, distress tolerance, managing children's behaviour, addressing parent's past trauma and impact on attachment, interpersonal effectiveness, dialectical thinking, developing children's routines, keeping children safe, and validation for both parent and child (Paper 1; Bartsch et al., 2015a).

A number of different intervention approaches have been recommended for families where a parent is diagnosed with BPD. For example, attachment-based approaches targeting mothers with a diagnosis of BPD and their children have been suggested (see introduction for description; Compés et al., 2016; Newman & Stevenson, 2008; Nijssens, Luyten, & Bales, 2013). However, there are no published evaluations demonstrating the efficacy of this approach specific to this population. Recommendations from clinicians (Paper 1; Bartsch et al., 2015a) trended towards an integrated approach drawing from the existing evidence-base around DBT, attachment-based therapies, and parenting skills.

Several studies have explored the possibility of integrating parenting interventions into the parent's treatment of their mental illness. For example, as a preliminary step towards integrating DBT and parenting interventions, one group of clinicians published a case study which explored whether DBT skills training group impacted on the parenting of four parents who experienced severe emotional dysregulation (Martin, Roos, Zalewski, & Cummins, 2017). The DBT skills training group was not adapted beyond the provision of examples of how skills could be used in parenting contexts. The results from post-group interviews and examination of self-report questionnaires indicated that DBT skills were used in parenting contexts and that there was some improvement in parenting assessments (e.g. less parenting stress, reduced psychological and lax control, and slight improvement in validation towards the child). However, given the small sample these findings require replication.

Another recent study adapted DBT to provide a 12-week DBT-informed skills training program for mothers experiencing disorders of emotional regulation (n= 21) in the perinatal period (Wilson & Donachie, 2018). Modules included mindfulness, distress tolerance, emotional regulation and interpersonal effectiveness but the content was modified to consider the demands of parenting infants. Results were encouraging, with participants reporting reduced distress, increased confidence and ability to regulate emotion. Unfortunately, the trial did not report on mother-infant interactions, parenting skills or infant outcomes. Nor did the evaluation include mothers with a diagnosis of BPD.

In another study, Renneberg and Rosenbach (2016) provided mothers with a diagnosis of BPD (n= 15) and their young children (ranging from newborns to six year olds) with a 12-week group program informed by principles of CBT and DBT. The program aimed to improve mothers parenting skills by teaching them about the

needs of the child, coping with stress, emotional regulation and self-care. The program was considered an adjunct to the mother's standard mental health treatment. Qualitative feedback indicated both participant and clinician acceptability for the intervention. Unfortunately, pre-post comparisons assessing changes in parenting or improvement in the mother-child relationship were not reported. Further research regarding the potential effectiveness of short-term parenting interventions for parents with a diagnosis of BPD is required.

Most recently, Sved Williams and colleagues (2018) reported outcomes for a 24-week group intervention targeting mothers with borderline symptoms ($n = 20$; 75% met BPD diagnostic criteria) and their infants (aged 0 to 3 years). The approach adapted DBT skills training group to focus on parenting and the mother-infant relationship. Outcomes were promising, with significant improvement in measures of mood, anxiety, borderline symptoms and reflective functioning across the course of the group program. The study also indicated improvements in the dyadic relationship and increases in parenting sense of competence approached significance. This study supports the recommendations of clinicians to integrate approaches when developing interventions for parents with a diagnosis of BPD (Paper 1; Bartsch et al., 2015a). While this evaluation is encouraging, as noted previously the results require replication utilising an independent research team, blinded raters of outcomes, assessment of infant outcomes, and a randomisation to treatment condition vs control.

The aforementioned studies indicate promising steps forward in the development of interventions for parents with a diagnosis of BPD. Interestingly, the approaches that have been proposed target the perinatal period or parents of young children (0-6 years). Interventions targeting parents with a diagnosis of BPD and offspring in middle childhood may also be beneficial. Changes to the family context

occur as children transition from pre-school to school and the importance of particular risk and protective factors for parenting may shift as the child develops and the demands of parenting change (Ellingsen, Baker, Blacher, & Crnic, 2014). Middle childhood is an important time for children to learn self-regulation and to develop a sense of identity as they start to individuate away from their parents. An increasing sense of autonomy could lead to more challenging behaviour and more conflict (Bradley, Iida, Pennar, Owen, & Vandell, 2017). Indeed, the limited literature available regarding parenting school-aged children with borderline symptoms is associated with less sensitivity and autonomy support (Macfie et al., 2017), increased hostility (Kluczniok et al., 2018; Macfie et al., 2017), role reversal and fearful/disorientated behaviour in response to the child (Macfie et al., 2017).

Parenting interventions targeting school-aged children may need to shift emphasis towards supporting the tasks of middle childhood. There are currently no interventions which specifically target parents with a diagnosis of BPD and their school-aged children. One study has adapted DBT for pre-adolescent children and recommended the inclusion of a parent/care-giving component which included behavioural modification and validation (Perepletchikova et al., 2011). An RCT of this intervention among pre-adolescent children (aged 7 to 12 years) with disruptive mood dysregulation disorder (DMDD) demonstrated preliminary efficacy in child outcomes and was rated by the parents as more acceptable and satisfactory when compared to treatment as usual (Perepletchikova et al., 2017). While these parents were not reported to have a diagnosis of BPD, the approach of incorporating parenting principles into a DBT format was acceptable to parents and may hold promise for parents with borderline symptoms.

Adolescence is also a developmental period in which parenting challenges may arise. There is a lack of interventions specifically targeting parents with a diagnosis of BPD and their adolescent children. DBT for adolescents which includes the parent in treatment has well-established data on treatment efficacy as it relates to reducing adolescent suicide attempts, non-suicidal self-injury, and self-harm where the adolescents' suicide risk is considered high (McCauley et al., 2018). A recent study found that youth and parents with higher levels of emotional dysregulation responded better to DBT (which includes the parent in multifamily skills training) compared to individual/group supportive therapy and it was recommended that DBT be offered when these risk factors were present (Adrian et al., 2019). The aforementioned findings are promising, though there are no evaluations of whether this approach is appropriate for parents with a diagnosis of BPD and their adolescents.

Traditionally, long-term and intensive interventions have been recommended for the treatment of BPD. However, more recently a brief intervention model has been proposed which aims to teach mental health clinicians in the public sector to help parents with a diagnosis of BPD strengthen and enhance their parenting skills (McCarthy et al., 2016). The brief intervention was designed to complement other evidence-based therapies for BPD and is organised around three core strategies: 1) child protection and family safety, 2) to improve communication between parent and child, and 3) to improve parenting skills and strategies. Clinicians who trained in the brief parenting intervention reported that the workshop improved their knowledge, clinical skills, willingness and optimism towards working with families where a parent was diagnosed with BPD (McCarthy et al., 2016). A 12-month follow up study with clinicians reported that they had used the intervention to help parents be mindful of parenting, de-escalate reactivity in the family environment, and normalise

parenting challenges (Gray, Townsend, Bourke, & Grenyer, 2019). The strategies outlined in this intervention align with some of the parenting challenges highlighted in the current thesis. However, further research is required to establish the acceptability and effectiveness of this approach from the perspective of parents with a diagnosis.

Finally, parents with a diagnosis of BPD reported challenges in accessing supports that catered specifically to parents with a mental illness and their children. This finding highlights the importance of collaborative partnerships between adult and child mental health services, including the child protection sector. National initiatives have aimed to bridge this gap in practice and have focused on promoting better outcomes for children of parents with a mental illness (Fudge & Robinson, 2009). Further work is needed to support organisations to work collaboratively with families where a parent has a diagnosis of BPD. This could occur through partnerships between adult and child-focused services around care-planning and intervention for parents where a parent has a diagnosis of BPD. Staff education and training on how to work with parents with a diagnosis of BPD and their children may also be of benefit across adult and child-focused services.

7.4 Considerations for Future Research

A number of considerations for further research emerged from this body of work. First, the literature would benefit from more longitudinal investigations into risk and protective factors for the transgenerational transmission of borderline symptomology from parent to child, particularly as they relate to the second study outlined in this thesis. The final study in this paper identified parental empathy and authoritarian parenting style as potential mediators of parental borderline symptom

severity and offspring outcome. It is recommended that these findings are replicated utilising a longitudinal design. Furthermore, this research could be extended by investigating the potential mediating role of ‘inconsistency in parenting responses’ which has been highlighted as a potential core mechanism of transmission by a number of theorists (Stepp, Whalen, et al., 2012a; Elliot et al., 2015). Observational and ecological momentary assessment (EMA) studies may offer a mechanism for capturing information on parenting interactions occurring within the home environment.

The NHMRC (2012, p. 3) states that ‘having a diagnosis of BPD does not mean that a person cannot be a good parent’. Furthermore, the evidence suggests that not all offspring go on to develop clinically significant difficulties. Research is required to investigate resilience among parents with a diagnosis of BPD and among their children. The identification of protective factors would greatly inform the development of preventative interventions. Furthermore, a more strengths-based approach may assist in breaking down stigma around parenting with a diagnosis of BPD, motivate parents to engage with interventions where needed, and provide families with hope regarding future outcomes.

The second major area for development is to trial parenting interventions specifically targeting families where a parent has borderline symptoms. As mentioned previously, few parenting interventions have been designed to target the challenges characteristic of parenting with borderline symptoms despite the literature advocating for this for over a decade. While some relevant interventions have been trialled with parents with borderline symptoms, only one study provided pre-post data relating to parenting (Renneberg & Rosenbach, 2016; Sved Williams et al., 2018). Randomised

control trials with longitudinal follow up, and replication from independent research teams is required to inform clinical guidelines in this area.

Investigations may also consider the mechanisms of change underlying treatments to better understand the active ingredients which influence outcome. Furthermore, it would be clinically useful to better understand the ‘dosage’ of therapy required to influence change in parenting and improve outcomes for parent and child. Of the limited interventions proposed in the literature, the programs vary from long and intensive to brief adjuncts to mental health interventions. Stepped models of care advocate for the provision of interventions of varying intensity which target personality disorder symptoms at different levels of acuity to enhance access across the system of care (Grenyer, Lewis, Fanaian, & Kotze, 2019). A similar approach to the roll out of parenting interventions for families with a diagnosis of BPD may be useful in contexts where resources are constrained. However, consideration would need to be made to identify indicators for the various levels of intervention such as brief interventions (e.g. 3-6 sessions), short term interventions (e.g. 3 months) and longer-term intensive therapies (e.g. 6-18 months).

The aforementioned interventions relate to perinatal and early childhood periods. There is a lack of research exploring parenting interventions for parents with a diagnosis of BPD who have school-aged children or adolescents. Further research is required to investigate the effectiveness of interventions across developmental periods, with an exploration of what targets may be most useful at each time point. For example, it may be more important to target attachment during the perinatal/infant phase compared to later stages of childhood and adolescence where discipline and support of individuation may be more prominent issues.

Finally, there is a lack of studies investigating clinician attitudes and potential stigma towards parents with a diagnosis of BPD. Given that consumers anticipated stigma and judgement around their parenting (Paper 3; Bartsch et al., 2015a) and that stigma towards people with a diagnosis of BPD is common (Ring & Lawn, 2019) investigating whether there are stigmatised attitudes towards people with a diagnosis of BPD around their parenting capacity may be worthwhile. This is relevant to the implementation of intervention programs as clinician attitudes may represent a barrier to parent referral and engagement in treatment. Clinician attitudes are also amenable to change through psychoeducation and training at both an individual (Knaak, Szeto, Fitch, Modgill, & Patten, 2015) and system-wide level (Day, Hunt, Cortis-Jones, & Grenyer, 2018).

7.5 Thesis Strengths and Limitations

A strength of the current thesis was the mixed methods approach which added credibility to our findings through the triangulation of data through different sources and methodologies. The qualitative approach was utilised to garner an in-depth understanding of parenting experiences. The hypotheses generated through the qualitative studies were then tested utilising quantitative research methods. This thesis demonstrated convergence in themes between the two approaches. For example, the qualitative studies in paper 1 (Bartsch et al., 2015a) and 3 (Bartsch et al., 2016) uncovered themed parenting challenges including parental empathy and difficulties with discipline. The final paper utilised quantitative methods and confirmed statistically significant relationships between borderline symptom severity and these variables. Furthermore, the final paper tested the association between borderline

symptom severity and child psychopathology, with parenting challenges as potential mediators, as hypothesised in paper 2 (Bartsch et al., 2015b).

The project also examined the topic from both clinician and parent perspectives. Clinicians, through their contact with multiple patients and families can provide a wealth of valuable knowledge. Consumer perspectives have also been largely missing in the literature and the third paper which reports themes from the descriptions of parents' experiences contributes valuably to the field (Bartsch et al., 2016). While there were a number of investigations into the experiences of parents diagnosed with mood, anxiety and psychotic disorders, the voice of parents with a diagnosis of BPD was largely missing (Dolman et al., 2013).

Another strength of this thesis was the number of participants who experienced clinically significant borderline symptoms. In general, the sample sizes in the published literature tend to be small or focus on borderline symptoms in general community samples where the overall number of participants with clinically significant symptomology was likely to be low (Bertino et al., 2012; Conway et al., 2015; Kaufman et al., 2016). The overall number of independent samples studied in the field is also low. This trend is likely an artefact of the difficulties in recruiting participants with a diagnosis of BPD to participate in parenting research given concerns around stigma and fear of involvement from child protective services (paper 3; Bartsch et al., 2016).

The current thesis recruited participants with borderline symptoms as reported in paper 3 and 4. Participants in paper 3 ($n = 12$) were recruited through an adult community mental health service DBT skills training group programme with the majority (92%) meeting diagnostic cut off scores on the MSI-BPD at the time of interview. The final paper in the series reported data relating to borderline symptom

severity from parents (n=64) who indicated that they had been provided a diagnosis of BPD from a mental health professional and who were recruited through both community mental health services and online advertisements targeting people with this diagnosis. The mean borderline symptom severity score of the sample was comparable to that among respondents diagnosed with BPD (Bohus et al., 2009). The findings of these papers extend the research to two additional independent samples.

This thesis also had several limitations. First, although the researcher utilised a qualitative research design to explore parents' experiences and views, the approach and interpretation of results remained researcher led. Studies which do not have significant consumer input into the design, process, analysis and reporting of research may miss important issues (Happell & Roper, 2007). Future research may benefit from more active consumer participation, including involvement in the conceptualisation, design, conduct, and analysis of research findings.

Several of the studies included data that was gathered using an online survey design. The recruitment of participants online may be subject to sampling bias. For example, self-selected participants may have higher education and greater socio-economic status compared to groups who do not readily have access to a computer. This could impact on the generalisability of the findings. The author attempted to account for this in the final study of the paper by also recruiting via letters to consumers of community mental health services. These consumers were offered a hard copy of the survey and several were completed in this format.

Another challenge was that there was significant heterogeneity in the operationalisation of parenting constructs and child outcomes across the literature. For example, Eyden et al. (2016) noted that insensitive parenting was variably termed 'maternal sensitivity', 'insensitivity', 'intrusive sensitivity', 'intrusive negativity'. The

author of the current thesis aimed to theme parenting challenges by collating theoretically similar concepts. However, some theorists may argue for different constellations of concepts and terminology. It was also noted that there is debate in the literature around whether to measure parenting style, parenting dimensions, or domain-specific models (Smetana, 2017). The final paper in the series assessed parenting style. Future research may benefit from exploring dimensions of parenting (and the oscillation between these) to explore greater specificity in effects. Furthermore, observational measures of parenting behaviours would have added value to the findings of this body of work.

The studies in this thesis were also limited by a cross-sectional design which constrained causal inferences regarding the potential mechanisms for the intergenerational transmission of psychopathology from parent to child. As highlighted previously, the hypotheses of the current work require replication utilising a longitudinal research design.

An additional limitation to the current body of work was the lack of information relating to gender differences in the experiences of mothers and fathers with a diagnosis of BPD. While past research has predominantly focused on mothers, fathers were included in the recruitment of paper 3 and 4 given that the diagnosis isn't only restricted to women and that parenting is also a valued role for men. Unfortunately, despite attempts to recruit broadly, only seven fathers participated. As such there was not enough power to test gender differences within the results of the current study. It is recommended that future research explore the impact of a diagnosis of BPD on fathers and whether they would benefit from co-ed parenting programs or if interventions need to be specifically tailored to their needs. Finally, the present study lacked reports from children regarding their experience of having a

parent with a diagnosis of BPD. There have been limited studies exploring this perspective, and it would be a valuable area for future research.

7.6 Conclusion

This thesis presented a case for targeted interventions for families where a parent has a diagnosis of BPD. The body of work affirmed that children of parents with a diagnosis of BPD experience psychosocial adversity and psychopathology through clinician observations and parent-report. The researcher identified potential parenting challenges for parents with a diagnosis of BPD utilising a mixed methods approach. Parents with a diagnosis of BPD identified several barriers to engaging in treatment including difficulty finding local services that support parents with a mental illness and their children together. Parents with a diagnosis of BPD advocated for family-focused interventions and for appropriate treatment of their mental illness. The clinical implications of these findings were discussed and recommendations for the provision of targeted interventions for families with a diagnosis of BPD were provided. It is hoped that the development of targeted interventions will circumvent the transgenerational transmission of BPD and associated psychosocial problems, and lead to improved outcomes for both parents with a diagnosis of BPD and their children. This hope is expressed well in the words of one participant:

“what I found most hard about being a parent... it is really difficult because you are struggling against your own [maladaptive] coping and wanting to do the best [for your child]... it’s like trying to climb a mountain without the help of special equipment. So I hope that in future there will be more courses like this [DBT skills training group] so we don’t feel quite so alone”. (Mother one)

Chapter 8: References

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APPENDIX A

Interview questions from study one.

Qualitative Interview - CLINICIANS

Issues for parents with a diagnosis of Borderline Personality Disorder

1. Which client group do you work with? (Tick all that apply)
 - ☐ Parents who have a confirmed DSM-IV diagnosis of Borderline Personality disorder
 - ☐ Children of parents who have a confirmed DSM-IV diagnosis of Borderline personality disorder
 - ☐ Other (describe)_____
2. What is your professional background?
 - ☐ Psychologist
 - ☐ Psychiatry
 - ☐ Nursing
 - ☐ Social work
 - ☐ Occupational Therapist
 - ☐ Other (describe)_____
3. What is your role in working with these clients? (Tick all that apply)
 - ☐ Assessment
 - ☐ Individual Therapy
 - ☐ Group Therapy
 - ☐ Other (describe)_____
4. If you provide therapeutic services, which therapy model do you generally work from?
 - ☐ Dialectical Behaviour Therapy
 - ☐ Cognitive Behaviour Therapy
 - ☐ Schema Therapy
 - ☐ Attachment-based therapies
 - ☐ Mentalisation Therapy
 - ☐ Other (describe)_____
5. How many years' experience do you have working with this client group?

6. In which country are you located? _____

The following questions are aimed at gathering information about the impact of having a BPD diagnosis on the person's ability to provide 'good-enough parenting'. In general, the key roles of parenting include:

- Attending to the child's physical, intellectual, social and emotional needs
- Meeting the changing needs of the child as they grow
- Empathising with and understanding the child as an individual
- Provide a stable and nurturing environment (secure base)
- Protecting their child from harm by providing food, housing and safety
- Have age-appropriate understanding and expectations of their child
- Initiate, follow and enjoy child-centred activities.

From your observations of parents with a diagnosis of Borderline Personality Disorder, what are some of the problems they face in fulfilling the key roles of a parent?

In your experience, how have the specific symptoms of Borderline Personality Disorder impacted on the sufferers' ability to parent?

Emotional dysregulation (i.e. unstable emotions, chronic depression, anger, anxiety, loneliness, boredom etc.):

Behavioural dysregulation (i.e. suicidal behaviours, parasuicidal acts, impulsive behaviours, alcohol and/or drug abuse, promiscuity):

Interpersonal dysregulation (i.e. unstable relationships, poor social support, passive interpersonal problem-solving style, frantic efforts to avoid abandonment):

Cognitive dysregulation (i.e. black and white thinking, dissociation, stress-related paranoia, odd thinking, quasi-psychotic experiences):

Self dysregulation (i.e. unstable sense of self, low self-esteem, chronic feelings of emptiness):

Any Other comments:

In your experience of working with children of parents with a confirmed diagnosis of Borderline Personality Disorder, how do the symptoms of BPD impact on their children? Please include clinical examples if applicable.

For example, parental symptoms may include:

- Frantic efforts to avoid real or imagined abandonment
- Unstable and intense interpersonal relationships
- Markedly and persistently unstable self-image or sense of self
- Impulsive and/or destructive behaviours
- Recurrent suicidal behaviour, gestures, threats, or self-mutilating behaviour
- Marked reactivity of mood and affective instability
- Chronic feelings of emptiness
- Inappropriate, intense anger or difficulty controlling anger
- Transient, stress-related paranoid ideation or severe dissociative symptoms

In general, what factors have you observed as ‘protective factors’ for children who have a parent with BPD?

Linehan (1993) modified standard cognitive behavioural behaviour by adding a dialectical worldview to address the extreme polarised thinking and behavioural patterns characteristic of BPD. A dialectical perspective aims to synthesise these polarities to assist the client towards more flexible thinking and to develop new solutions in the context of complex life problems. An example of a dialectic may be that ‘the consumer is doing the best they can vs they can also do better’. What dialectics have you observed that might apply to parenting conflicts in BPD (i.e. a desire to care vs. a need to be cared for)?

What parenting resources/supports/treatment programs or interventions have you observed to be effective in improving outcomes for BPD parents and/or their children? Why?

What parenting resources/supports/treatment programs or interventions have you observed to be ineffective in improving outcomes for BPD parents and/or their children? Why?

Finally, it is hoped that this information will inform the development of a program to address the challenges faced by BPD parents. In your experience, what treatment components would be essential to include in a parenting intervention for BPD parents?

APPENDIX B

Interview questions from study two.

FOCUS GROUP QUESTIONS

What is it like to be a parent when you have a diagnosis of Borderline Personality Disorder?

1. What is it like to be a parent?
2. What do you enjoy about being a parent?
3. What aspects of being a parent do you find challenging?
4. Describe your experiences of being a parent and having a diagnosis of Borderline Personality Disorder?
5. How does being a parent impact on your mental health?
6. If you take medication, what is the impact this on your parenting?
7. What happens if you become unwell and are temporarily unavailable to your child/ren (e.g. hospitalisation, crisis presentations)?
8. What parenting resources have you utilised?
9. What resources have you found to be helpful? Why?
10. What resources have you found unhelpful? Why?
11. What skills/resources would be helpful in improving your parenting experience?
12. Please share any other thoughts that you have on your parenting experience.